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**The Measurement and Prediction of Commitment in Dating
Relationships: A Full Model**

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**The Measurement and Prediction of Commitment in Dating
Relationships: A Full Model**

by

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Dissertation

Presented to the Faculty of the Graduate School of

the University of Texas at Austin

in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

The University of Texas at Austin

August, 2003

Dedication

I hereby dedicate this work to my wife, Wendy, for all the love we share and support she has given to me throughout this long process.

I also would like to dedicate this work to my beautiful daughter, Avery, who has helped inspire me in the short time that she has been with us.

Acknowledgements

I would like to acknowledge my supervisor, Cathy A. Surra, for her help, patience, and guidance in this work. I would also like to thank the members of my committee for their input and suggestions. I appreciate the help of my colleagues, Marko, Christine, and Tyfany who helped provide feedback. I also owe a great debt to the graduate students and research assistants who helped collect the UT-TRAC data.

The Measurement and Prediction of Commitment in Dating

Relationships: A Full Model

Publication No. _____

Nathan Roger Cottle, Ph.D

The University of Texas at Austin, 2003

Supervisor: Catherine A. Surra

Individuals in romantic, dating relationships engage in forecasting the future viability of their relationships based on information they receive. These predictions promote the development of commitment, or individuals' future orientations toward the relationship. This orientation includes their confidence in its future and their feelings about commitment. This study addressed issues raised in the literature regarding the conceptual overlap of commitment with its predictors in the measurement and prediction of commitment in a sample of 232 dating couples. Commitment was defined strictly to remove the content of the relationship from its measurement and to distinguish it from its causative factors, specifically passionate love, satisfaction, and coupleness. Using the strictly defined measure, a comprehensive model of commitment was introduced and tested to examine the relationships between commitment and its personal, moral, and structural predictors. Both personal (e.g., passionate love, satisfaction, and coupleness) and structural (e.g., social concern, alternative monitoring) predictors were associated with commitment. Significant interactions existed between coupleness and investments

for men and between coupleness and partner replacement for women. Finally, potential gender differences in the measurement and prediction of commitment were explored. No significant differences were found in the measurement and prediction of commitment for men and women. The results of this study indicated that commitment can be measured as a separate construct and that commitment is robustly associated with its personal and structural predictors.

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Chapter I: Introduction

Individuals in romantic, dating relationships undoubtedly engage in forecasting the future of their relationships. Although individuals may not make these predictions early on in their relationship, they gradually form expectations about its future viability. In this study, the development of a positive, future orientation toward the relationship is called commitment and includes individuals' confidence in the future of the relationship and their feelings about commitment.

As individuals begin to consider the future of their relationship, they may explore the range of its possible outcomes. From the start, individuals are likely to actively gather information about their relationship to help them to determine whether the relationship will continue over the long-term. This information may come from a number of internal influences, such as their own personal feelings toward the relationship, as well as external influences, such as input from their friends and family. Information that confirms individuals' expectations for the future stability of the relationship and feelings that about commitment may help develop a degree of positivity and future orientation toward the relationship. As individuals become more confident that their relationships will remain stable and last, they may increase their commitment to them. The causative factors of commitment are thought to be those influences associated with the confidence in future and feelings about commitment. Commitment, for example, is likely associated with passionate love, a sense of couple identity, and the enjoyment and satisfaction gained from the relationship and from interaction with the

partner. In addition to these feelings, external influences, such as the number and desirability of alternatives to the relationship, the amount of resources invested in the relationship, and the reaction of friends or family to the relationship, may be associated with commitment. Individuals who become even more serious in their relationships may feel a moral obligation to see the relationship through because they feel a sense of duty to the relationship or partner, or they value behaving in a consistent manner in general. Although one may posit that commitment may increase passionate love, a sense of coupleness, or greater investment in the relationships, these factors are thought precede the formation of commitment and continue to influence it as the relationship develops.

The definition of commitment in this study, as the future orientation toward the relationship, is consistent with definitions employed by others. Theorists generally agree that commitment refers to the persistence of a course or line of action over the long run (Becker, 1960). In the study of romantic relationships, all theorists agree that commitment concerns the future of the relationship. Commitment has been defined as partners' beliefs about the likelihood the relationship will continue over the long-term (Surra & Hughes, 1997; Surra, Hughes, & Jacquet, 1999); individuals' conceptions about the future of the relationship and their motivations to continue it (Johnson, 1991); and the stability of membership in a relationship (Kelley, 1983).

In the literature, however, disagreements have arisen regarding the meaning of commitment, especially when it is defined broadly. Some definitions are more comprehensive, including not only estimates of the future viability of the relationship, but also factors that are thought to theoretically cause commitment (cf. Surra et al., 1999).

Rusbult (1983) defines commitment as the intent to continue the relationship and the psychological attachment to it. Johnson (1991), however, views attachment to the relationship as a predictor of personal commitment. Lund (1985) defines commitment as judgments about relationship permanence, as well as, expectations regarding alternatives to the relationship and anticipated costs should the relationship end. Rusbult (1983) uses both alternatives to the relationship and expected costs as predictors of commitment in the investment model. Differences in the meaning of commitment have created confusion and dissonance in the literature, which, in turn, have affected its measurement.

This study will address the issues of conceptual overlap raised in the literature regarding the measurement and prediction of commitment in dating couples. The goals of this study are (a) to narrowly define commitment in order to distinguish it from its causative factors; (b) to determine if commitment, using a focused definition, can be measured as a single, unitary construct; (c) to empirically test its independence from other highly related concepts; (d) to introduce and test a comprehensive model of commitment that examines the relationships between commitment and the factors theorized to cause it; and (e) to explore gender differences in commitment with respect to the measurement of commitment and the relationships between commitment and its predictors.

Understanding the differences in the theoretical approaches to commitment in the literature, especially their strengths and weaknesses, will lay the foundation for the definition, measurement, and prediction of commitment in this study. Although many

different approaches to commitment exist, most can be categorized into two groups, the component-model and prediction-model approaches (Surra et al., 1999).

The Component-Model Approach

In the first approach, commitment is viewed in terms of its components (Adams & Jones, 1997; Johnson, 1991a; Stanley & Markman, 1992). According to this approach, commitment *is* its components. In other words, commitment is defined by its components and cannot be measured independently of them as a distinct construct. One researcher using this approach has defined commitment as the decision and motivation to continue the relationship (Johnson, 1991a). The motivation to continue the relationship comes from the phenomenological experience caused by the feelings that one wants to, ought to, and has to remain in a relationship (Johnson, 1991a). These feelings are categorized into three components: personal, moral, and structural commitment. Personal commitment includes, for example, attitudes toward and feelings about the relationship or partner (e.g., love, trust, coupleness) and the development of a relational identity. Moral commitment consists of, for example, the values placed on behaving consistently in general, a moral obligation to maintain the relationship, and a sense of obligation to the partner. Structural commitment includes, for instance, irretrievable investments in the relationship, social reaction or concern of family and friends, the perceived quality of alternatives to the relationship, and the cost associated with terminating the relationship.

In an exploratory factor analyses, Johnson and his colleagues (1999) demonstrated that the components of personal and moral commitment divided into five separate factors in a sample of 187 married individuals. Personal commitment included

two factors, satisfaction with the relationship and a combined factor of love and coupleness. Moral commitment included three factors, attitudes toward divorce, the values placed on behaving in a consistent manner, and a sense of obligation to the partner. The components of structural commitment were not included in factor analyses because they were thought to represent the summation of external constraints and were not highly correlated with one another (Johnson et al., 1999)

Others using this approach have defined commitment in terms of two components, the personal dedication to the relationship and the constraints against leaving it (Stanley & Markman, 1992). Personal dedication includes, for instance, the degree to which partners view themselves as a couple, the importance of the relationship relative to other activities in their lives, and the extent to which they want the relationship to continue. Constraint commitment consists of, for example, social concern from friends and family, investments in the relationship, and partner's views about the morality of divorce. Exploratory factor analyses revealed that, although two main factors, dedication to the relationship and constraints against leaving it, explained a large percentage of the variance, social concern and availability of alternatives loaded on the dedication factor. Additionally, a third factor existed that was comprised mainly of attitudes about the morality of divorce.

Adams and Jones (1997) defined commitment as individuals' intentions to maintain a course of action for the foreseeable future, and measured commitment in terms of three components corresponding to those identified by Johnson (1991). Commitment to spouse refers to the attraction to the partner based on devotion and satisfaction.

Commitment to marriage includes individuals' beliefs in the sanctity of marriage as well as their personal sense of obligation to keep their vows. Feelings of entrapment refer to the fear of social, legal, and financial costs of ending the relationship. Exploratory factor analyses revealed that the three suggested factors, commitment to spouse, commitment to marriage, and feelings of entrapment (Adams & Jones, 1997). Although the content may vary slightly from model to model, the common foundation underlying these component models is the view that commitment is its components.

The strength of the component-model approach is the use of a wide range of factors contained in the components to represent the total experience of commitment. The components of all of these models include elements of attraction to the relationship, moral or normative pressures to remain in the relationship, and external and internal constraints to leaving the relationship. By including an array of factors in these components, the component-model approach presents a comprehensive view of commitment.

The challenge facing researchers using the component-model approach is that because commitment is thought to be encapsulated by its components, some feel commitment may not, or theoretically cannot, be measured independently from its components. This challenge raises problems when researchers try to explore the components' associations with or the prediction of commitment. Many researchers who use the component-model approach are left without a dependent variable of commitment to predict.

This study follows the component-model approach in that it defines commitment similarly to other component-model definitions and employs a wide variety of factors to explain commitment. This study, however, also extends the theory of the component-model approach by measuring commitment as a single, unitary construct. This extension may further divide researchers who use the component-model approach into two smaller groups. The first group may likely support the idea of strictly measuring and predicting commitment. Some researchers using the component-model approach, for example, have associated the components of commitment with various, unidimensional measures of commitment created by others to explore the relationships between commitment and its components (Stanley & Markman, 1992).

The second group may feel that commitment is multifaceted, and may not agree that commitment can be measured unidimensionally (Johnson, 1991b). These researchers have taken various approaches to the measurement of commitment. Instead of measuring commitment as a unidimensional variable, Adams and Jones (1997) used items from potential predictors, including the quality of alternatives, investments, relational identity, personal dedication, moral constraints, social constraints, and financial constraints, to measure aspects of commitment. They then factor analyzed these items to reduce them into three components. To establish the validity of these factors they associated each of the components with a number of established scales, such as Locke – Wallace Marital Adjustment Test and University of California at Los Angeles Loneliness Scale.

Johnson, Caughlin, and Huston (1999) measured commitment as three separate components, personal, moral, and structural commitment, in a sample of 187 married

individuals. Each component was measured by means of one question asking how much one wants to remain in the relationship for personal commitment, how much one feels he/she should remain in the relationship for moral commitment, and how much one feels he/she has to remain in the relationship for structural commitment. The three 1-item measures were used as dependent variables and were predicted separately for men and women by the hypothesized factors of the components of personal, moral, and structural commitment in six hierarchical regressions. In these regressions, for example, the 1-item measure of personal commitment was predicted by passionate love, satisfaction, and couple identity, the factors of personal commitment, in the first step. The factors of the remaining two components were combined and entered in the second step to test whether they explained any additional variance above and beyond the personal factors. With respect to personal commitment, for instance, the second step included the hypothesized factors of the moral commitment, including attitudes toward divorce, partner contract, and values of consistency, and the factors of structural commitment, including social pressure, alternatives, termination procedures, and investments. The hypothesized factors of personal, moral, and structural commitment explained a significant amount of variance in the first step for three of the six models for personal commitment for men and women and moral commitment for women only. The second step including the factors from the other components explained a significant amount of additional variance in two of the six regressions, personal commitment for women and structural commitment for women (Johnson et al., 1999).

The measurement of commitment as three separate components, however, provided only modest evidence for the associations among the factors of the components and the 1-item measures of the components (Johnson et al., 1999). A closer inspection of the coefficients of the regressions showed that only 4 of the 20 hypothesized associations between factors of each component and the corresponding 1-item measure of the component were significant. The 1-item measure of personal commitment for women, for example, was predicted by passionate love and couple identity, but not satisfaction. Additionally, 5 of the 34 associations in the second step of the regressions between the factors of other components and the 1-item measure of a different component were significant above and beyond the hypothesized factors. The 1-item measure of personal commitment for women, for example, was significantly predicted by attitudes towards divorce, obligation to the partner, real alternatives to the relationship, and social pressures to continue the relationship. Two possible explanations exist for the weak associations between the 1-item measures of the components of commitment and the factors used to predict them. Either the single-item measures were vague and limited in their ability to distinguish effectively among the factors of the components of commitment, as Johnson and his colleagues (1999) suggested, or the theory and rationale behind the component-model approach to commitment is faulty.

The Prediction-Model Approach

The second approach characterizes commitment as a distinct concept that can be measured independently from the factors theoretically thought to cause it (Bui, Peplau, & Hill, 1996; Rusbult, 1980, 1983; Surra et al., 1999; Sacher & Fine, 1996). Using a

measure of commitment as a dependent variable, it is possible to analyze effects of predictors on commitment. I used the prediction-model approach in this study to measure and predict commitment.

The prediction-model approach to commitment also has its weaknesses. The first and perhaps greatest weakness in research using the prediction-model approach is that commitment has not been shown to be clearly separated from the factors that are theorized to cause it, specifically, the factors of personal commitment (Johnson, 1991b; Surra, 1990; Surra et al., 1999). The overlap between commitment and its predictors may be found in the definition and in the measurement of commitment. In the investment model, for example, the definition of commitment combines intent to continue and attachment to a relationship into a single measure of commitment used as a dependent variable (e.g., Rusbult, Martz, & Agnew, 1998), whereas other models have used attachment to the relationship to predict personal commitment (Johnson, 1991a, Stanley & Markman, 1992).

Others have indicated that the overlap between commitment and its predictors may be due to the use of similarly worded items in the dependent and independent variables in the same study (Surra et al., 1999). In a study of the reliability and validity of the measures in the investment model, for example, Rusbult and her colleagues (1998) used one item to measure commitment (i.e., “It is likely I will date someone other than my partner in the next year”) that had wording that was very similar to items used to measure the perceived quality of alternatives (i.e., “The people other than my partner with whom I might become involved are very appealing”). Johnson et al. (1999) showed

in hierarchical regressions from data collected from a study of 187 married individuals that when commitment is measured using items that appear to overlap with its predictors (i.e., “How committed do you feel toward your partner”; and “How attached to you feel toward your partner”), it is related only to personal predictors of commitment, namely passionate love, satisfaction, and couple identity. No additional variance beyond that explained by the personal predictors was explained by the moral or structural predictors.

Other evidence of the overlap between commitment and its predictors is found in the relationship between commitment and satisfaction in the investment model. The zero-order correlations between commitment and satisfaction in three samples in one study were high, ranging between $r = .75$ to $r = .84$ (Rusbult et al., 1998). Although satisfaction and commitment are thought to be measured distinctly in the model, they shared between 56% and 70% of the variance in common. Thus, satisfaction and commitment, when measured this way, might be considered to be a single construct. In addition, in one of the three samples in the same study (Rusbult et al., 1998), all five commitment items cross-loaded more highly on the satisfaction factor (factor loadings = .65, .67, .66, .50, .62) than on the commitment factor for which they were intended (factor loadings = .49, .46, .41, .10, .09). In his study of the satisfaction in relationships of gay and lesbian partners, Kurdek (1991), found that satisfaction and commitment were so highly correlated that he dropped commitment from the model.

The overlap between commitment and its predictors either in definition or measurement has an effect on the results of the analyses of these variables. Most importantly, the association between the predictor variables and the dependent variable of

commitment may be overstated. Other researchers have also questioned whether these associations represent the actual correlations or inflated associations due to a more general positivity effect (Kurdek, 2000; Lund, 1985; Lydon, Pierce, & O'Regan, 1997; Surra, Gray, Cottle, & Boettcher, in press). To overcome these issues, research using the prediction-model approach must demonstrate the independence of the measurement of commitment from its predictors. This study will attempt to measure commitment as a separate construct from its predictors.

A second weakness of the prediction-model approach is the use of relatively few predictors to explain commitment in most models. While these models may appear to be parsimonious and to predict robustly, they do not fully represent the complexity of commitment. The investment model (Rusbult, 1980, 1983), for example, uses satisfaction, investments, and alternatives to predict commitment, and ignores other potential predictors, such as passionate love, coupleness, social concern, and the values placed on behaving consistently. One possible reason for the comparative simplicity of the investment model is the variety of relationships in which it is used to predict commitment. The investment model has been used to explain commitment in romantic couples who are dating (Rusbult, 1983), married (Drigotas, Rusbult, & Verette, 1999), or homosexual (Kurdek, 2000), and friends (Lin & Rusbult, 1995). In contrast to the prediction-model approach, the component-model approach has identified a number of additional factors, such as passionate love, coupleness, and social pressures to continue the relationship that might serve as potential predictors of commitment in models using

the prediction-model approach. I will predict commitment in this study using many of these potential predictors identified by component models of commitment.

In this study, I use the strengths of both the component-model and prediction-model approaches to investigate commitment by first determining whether commitment can be measured as a unitary construct. Here, I use a focused definition that concerns individuals' future orientations toward the relationship. Then, I examine whether commitment can be measured independently from its predictors. The first weakness identified in the prediction-model approach is the conceptual overlap in the definition and wording of items in the measurement of commitment and its predictors, especially the factors of personal commitment. To overcome this weakness, I have narrowed the definition of commitment and its measurement to free it from the content of the relationship and to eliminate the overlap in the measurement of the personal predictors of commitment and the dependent variable of commitment itself. Similar steps have been taken to purify the measurement of relationship quality or satisfaction. Researchers have removed the content of the relationship from the measurement of satisfaction by means of the use of focused definitions and the creation of new scales of items that do not conceptually overlap (Fincham & Bradbury, 1987; Glenn, 1990; Huston, 2000; Huston, McHale, & Crouter, 1986; Norton, 1983).

I have defined commitment in this study as individuals' future orientations to the relationship. Thus, a person who is highly committed has confidence that the relationship will last and has positive feelings about commitment. This focused definition of commitment will guide the face validity of the measurement of commitment at the item

level. As was done in the literature on relationship satisfaction, similarly worded items will be removed from the measurement of commitment to help ensure its conceptual distinction from its predictors. By limiting the definition and measurement of commitment, I hypothesize that commitment can be measured as a unitary construct. I also hypothesize that commitment can be measured independently from the personal predictors of commitment, specifically passionate love, satisfaction, and coupleness.

A second weakness identified in the prediction-model approach has been the use of a limited set of factors, rather than a wide variety of factors, including personal, moral, and structural factors, to predict commitment. Although some models have shown robust prediction of a measure of commitment (e.g., Bui et al., 1996; Rusbult, 1980, 1983), these models have only used satisfaction, investments, and perceived alternatives as predictors of commitment. This study is the first to predict commitment in dating couples with a more wide-ranging set of factors.

A Full Model of Commitment

Using the focused definition of commitment, the next objective of this study was to predict commitment using personal, moral, and structural factors in a full model (see Figure 1). Each predictor on the left is hypothesized to be associated with commitment with the direction of the effect noted as either positive or negative. The causal order implied by the model suggests that the predictors are the antecedents of commitment. As the predictors in the model develop in the relationship, they are thought to contribute information to individuals that will either strengthen or weaken their future orientation to the relationship. Commitment is the outcome as a measure of individuals' confidence in

the future of the relationship and feelings about commitment. Using correlational data, one could alternatively hypothesize that the direction of the causal order could be reversed; however, the development of the predictors is thought to precede the formation of commitment and, therefore, to influence individuals' orientation to the relationship in the hypothesized direction.

The predictors of commitment in this model correspond with many of the factors used as components in other models (Adams & Jones, 1997; Johnson, 1991a; Stanley & Markman, 1992). Passionate love, satisfaction, and a sense of coupleness were the personal predictors in this model. The values placed on behaving in a consistent manner were the moral predictors. The structural predictors were the social concern or pressure from family and friends to continue the relationship, the tangible or financial investments in the relationship, the monitoring of and thinking about alternatives, and the perceived quality of alternatives to the relationship.

Personal predictors of commitment. The personal predictors of commitment to a relationship include feeling love for one's partner (Lund, 1985), being satisfied with the relationship (Rusbult, 1983), and a sense of coupleness (Stanley & Markman, 1992). Of these three, love has received the least attention in the literature as a predictor of commitment. In this study, I measured passionate love, defined as the intense attraction to or longing for another (Hatfield & Sprecher, 1986), as a personal predictor of commitment. This type of love is typically developed early in the relationship and is a antecedent to commitment. Kelley (1983) suggested that even though love and commitment have much in common conceptually, they should still be considered two

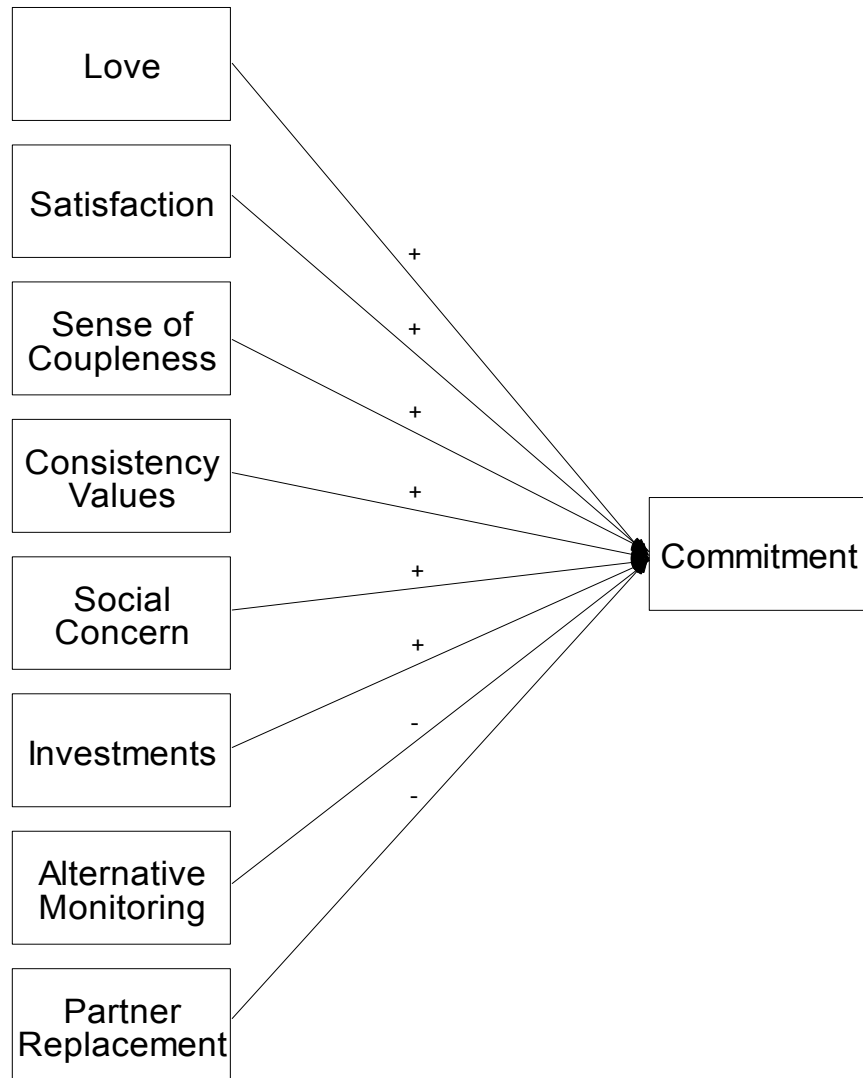


Figure 1. Proposed full model of commitment with hypothesized relationships.

distinct concepts. Lund (1985) demonstrated empirically that commitment and love are highly positively correlated, but can be measured independently from one another. In a factor analyses from the same study, love and commitment items loaded separately on two factors with relatively few items cross-loading on both factors. Additionally, partial correlations suggested that commitment and love were distinct from one another, as commitment remained correlated with relationship length and type even after controlling for love. When the two variables are switched, however, the correlation between love and relationship length and type disappeared after controlling for commitment (Lund, 1985). The theoretical and empirical evidence suggests that love and commitment are highly correlated, but remain conceptually distinct.

Satisfaction is the second personal predictor of commitment in the model tested here. Satisfaction refers to the evaluation of the quality of the relationship (Fincham & Bradbury, 1987). Satisfaction has been a robust predictor of commitment in studies that have tested the investment model (Bui et al., 1996; Rusbult, 1983; Rusbult et al., 1998; Sacher & Fine, 1996). As noted previously, commitment and satisfaction are highly correlated, using measures from the investment model (Rusbult et al., 1998). In regressions using these measures, satisfaction has consistently and significantly predicted commitment (Bui et al., 1996; Rusbult, 1983; Rusbult et al., 1998). These correlations and betas may have overstated the relationship between satisfaction and commitment due to the items used to measure each.

Nevertheless, even when commitment is measured in a more narrow way and purged of items that tap into personal commitment, satisfaction should still be positively

related to commitment in dating couples. Using different measures, others have found similar correlations between satisfaction and commitment, ranging from $r = .70$ to $r = .72$ in a sample of 42 dating couples (Sacher & Fine, 1996). In this study, commitment and satisfaction will be measured using items that are free from the content of the relationship to ensure that the two are conceptually distinct.

The third personal predictor of commitment tested here is a sense of coupleness. This sense is derived from the development of a couple identity and the importance of the relationship, relative to other activities in an individual's life (Stanley & Markman, 1992). Couple identity corresponds to the identification of part of one's own self in terms of the relationship. The correlation between a 1-item measure of commitment and couple identity was $r = .56$ in a study of dating, engaged, and married individuals (Stanley & Markman, 1992). To further establish the construct validity of their measure of couple identity, Stanley and Markman (1992) correlated couple identity with three additional measures of commitment using data from a second sample of 279 individuals in married and dating relationships. The correlations between three measures of commitment and couple identity ranged from $r = .53$ to $r = .72$. Commitment was measured in three separate ways in these analyses, as the desire for the relationship to last, as the general degree of commitment on a 100-point scale, and as the intent to continue and attachment to a relationship (Stanley & Markman, 1992). Although the definition and measurement of commitment differed in these three measures, the correlations were relatively similar in magnitude and direction. Based on the empirical evidence from the literature

regarding the personal predictors of commitment, I hypothesize that passionate love, satisfaction, and a sense of coupleness will be positively related to commitment.

Moral predictors of commitment. Moral predictors of commitment include the personal obligation to a specific partner, values placed on being consistent in general, attitudes toward the morality of divorce, and a sense of duty to a specific relationship (Johnson, 1991a; Lydon et al., 1997; Stanley & Markman, 1992). Regression analyses on data gathered from 187 married individuals showed that moral commitment, measured as the feeling that one ought to remain in the relationship, was not related to values of consistency or obligation to the partner for men or women and was only related to attitudes toward divorce for women (Johnson et al., 1999). Some have suggested that moral predictors are generally not related to commitment in dating couples (Rusbult, 1991). Others have demonstrated that moral commitment, measured as obligation to the partner and relationship, was associated with commitment in dating couples only when they were facing important transitions, such as the beginning of a long distance relationship (Lydon et al., 1997). In a sample of 279 individuals in dating and married relationships (Stanley & Markman, 1992), however, associations among three measures of commitment and values of consistency ranged from $r = .42$ to $r = .46$. The correlations between these measures of commitment and a measure of the morality of divorce were weaker, ranging from $r = .20$ to $r = .35$. Because of the stronger evidence for the relationship between the values of consistency and commitment, I used the values placed on behaving consistently as a moral predictor of commitment. Considering the mix of evidence regarding the association between the values of consistency and

commitment, I hypothesize that the values placed on consistency will be positively, but weakly, related to commitment.

Structural predictors of commitment. The structural predictors of commitment include barriers to ending a relationship, such as the social, practical, financial, or legal consequences associated with dissolution (Adams & Jones, 1997; Johnson, 1991a). One external influence on relationships is the social pressure from either family or friends to maintain or terminate the relationship (Stanley & Markman, 1992). The correlation between a 1-item measure of commitment and social concern was $r = .63$ in a study of dating, engaged, and married individuals (Stanley & Markman, 1992). With three additional measures of commitment using data from 279 dating and married individuals, social concern correlated positively, ranging from $r = .47$ to $r = .65$ (Stanley & Markman, 1992). Regression analyses on data gathered from 187 married individuals, however, revealed that social pressure was not related to structural commitment (Johnson et al., 1999). The strong relationships found in the samples that included dating individuals suggest that social concern should be positively related to commitment in dating couples.

Irretrievable investments made in the relationship are another structural predictor of commitment. The term investments has been used broadly to describe many different types of contributions to the relationship. Some researchers have measured investments psychologically and socially, including time, effort, self-disclosure, shared identity, intellect, and memories (Bui et al., 1996; Rusbult et al., 1998). Investments, however, may also be more tangible, such as money, possessions, or resources (Stanley & Markman, 1992). When investments are characterized by psychological or social

concepts, they are likely to be more positively related to the personal predictors of commitment, whereas tangible investments should be less likely to be related to the personal predictors of commitment. In a comparison between measures of commitment using data from 279 dating and married individuals, a measure of tangible investments, which focused on possessions and money, was only weakly related to commitment with correlations ranging from $r = .21$ to $r = .26$ (Stanley & Markman, 1992). In the current study, investments were defined exclusively in terms of tangible items, including money and possessions in order to separate the measurement of investments from the measurement of the personal predictors. The evidence from these prior studies suggested a weak, but positive, relationship between investments and commitment.

One of the strongest structural predictors is the perceived availability of potential alternatives to the relationship (Johnson, 1991a; Rusbult 1980, 1983). The perception of alternatives has been defined in the literature in terms of both an individual's thinking about or openness to interaction with alternatives (Stanley & Markman, 1992), labeled alternative monitoring, and an individual's perception of the ability to replace one's partner with a potential alternative if the relationship were to end (Udry, 1981), labeled partner replacement. Alternative monitoring refers to an individual's openness to and attention toward perceived alternatives to the relationship, whereas partner replacement refers to the perceived ability and desire to replace the partner with another should the relationship end. In associations among three measures of commitment and alternative monitoring in a sample of 279 individuals in either dating or married relationships (Stanley & Markman, 1992), correlations between alternative monitoring and measures

of commitment ranged from $r = .42$ to $r = .67$ with higher scores indicating less monitoring of alternatives. In addition to their openness to perceived alternatives, individuals are thought to gauge the availability of actual, potential alternatives, including being alone, compared with the rewards they receive from their current relationship and partner. In the same study as above, the correlations between a measure of partner replacement and the measures of commitment ranged from $r = .19$ to $r = .26$ (Stanley & Markman, 1992). For these reasons, both an individual's alternative monitoring and partner replacement were included in the model and were expected to be negatively related to commitment. Therefore, I hypothesize that social concern from family and friends and tangible investments will be positively related to commitment. Both alternative monitoring and partner replacement will be negatively related to commitment.

The association between these structural factors and commitment may not always be salient in a happy, satisfied relationship. Several researchers have suggested that structural factors have a greater influence on commitment when the personal predictors of commitment are low (Adams & Jones, 1997; Johnson et al., 1999; Kurdek, 2000; Levinger, 1976; Miller, 1997; Stanley & Markman, 1992). In a sample of 598 married individuals, for example, researchers found that the association between commitment and partner replacement was stronger and significant when satisfaction was low, but was weaker and nonsignificant when satisfaction was high (Adams & Jones, 1997). For this reason, I will test the association between commitment and each of the structural factors in the model under conditions of low, medium, and high levels of the personal predictors of commitment using interaction terms in hierarchical regressions. Therefore, I

hypothesize that the association between commitment and both social concern from family and friends and tangible investments will be more strongly positive when the personal predictors are low than when the personal predictors are moderate or high, whereas the association between commitment and both alternative monitoring and partner replacement will be more strongly negative when the personal predictors are low than when the personal predictors are moderate or high.

Gender Differences

In the study of commitment, men and women have often been combined in the same analyses (e.g., Lund, 1985; Rusbult et al., 1998). When men and women are combined, the implicit assumption is that the causes of men's and women's future orientations to the relationship are similar. Although one study suggested that the relationships between the predictors and commitment in the investment model are identical for men and women (Bui et al., 1996), others using a similar model have found that the predictors of commitment were different for men and women (Sacher & Fine, 1996). The results from path analyses on data from 42 dating couples showed that men's commitment was predicted by their own satisfaction and their own perceived alternatives (Sacher & Fine, 1996). In the same model, women's commitment was predicted by their own satisfaction and the length of the relationship. Gender differences have also been found between men and women in the measures of the investment model, with women reporting higher average levels of satisfaction, greater alternatives, greater investment, and stronger commitment in samples of dating individuals (Rusbult et al., 1998). In mean comparisons between the reports of men and women, men reported paying

significantly more attention to alternatives than women (Miller, 1997). In analyses comparing types of relationships and the involvement with the social network, women reported greater levels of network interaction than men (Johnson & Leslie, 1982). Given these differences in mean levels and in the prediction of commitment, this study will test to see if commitment can be measured similarly for men and women and if gender differences exist in the prediction of commitment.

Chapter II: Method

Data were obtained from the University of Texas-Tracing Relationships And Commitment (UT-TRAC) longitudinal study of premarital couples. This study was conducted in three phases. Phase 1 consisted of face-to-face interviews. Phase 2 comprised seven short, monthly, face-to-face interviews, and Phase 3 repeated the procedures from the Phase 1 interview. Usually, a same-sex researcher interviewed each respondent, and coupled partners were always interviewed separately.

Sample

Respondents were identified by means of random-digit dialing of households in the greater Austin, Texas, area. To meet eligibility requirements, respondents had to be never-married, 19 to 35 years of age, and dating someone of the opposite sex who also agreed to participate. The final sample of 464 individuals, or 232 heterosexual, dating couples, was taken from the data collected in Phase 1. The mean length of these relationships was 27 months, but the median length was 21 months. The participants reported that they were in various stages in their dating relationships with 8% casually dating, 48% seriously dating, 27% privately committed to marriage, and 16% publicly committed to marriage. The participants were racially diverse, with the majority identifying themselves as Caucasian (70%); the remaining participants identified themselves as Hispanic (16%), African American (7%), and Asian or Pacific Islander (6%). Less than 1% were Native American. The median age of the sample was 23 years ($SD=3.60$ years), and the average educational level was 14.8 years ($SD=1.91$). Approximately 27% of those who were contacted by phone and who said that they met

all the criteria participated in the study with their partner (Jacquet & Surra, 2001).

Procedure

During the Phase 1 interview, respondents answered questions about their social and background characteristics, personality, and preferences for activities. Next, respondents retrospectively graphed their commitment to marrying their current partner from memory over the course of their relationship using an established procedure (cf. Huston, Surra, Fitzgerald, & Cate, 1981; Surra & Hughes, 1997). Commitment to marrying was operationalized as the respondents' estimates of the chance of marriage to their partners. Participants were shown a graph where chance of marriage ranged from 0% to 100% on the vertical axis and time in months on the horizontal axis. Participants were told that the chance of marriage was an estimate of the possibility that their current relationship would result in marriage. If they were certain that they would never marry their partners, their chance of marriage would be 0%, but if they were certain they would eventually marry their partners, their chance of marriage would be 100%. They also completed a number of questionnaires about the characteristics and quality of their relationships. Rusbult's (1992) measure was used to assess the degree of commitment, and participants rated the items on a scale of 0 to 8. Braiker and Kelley's (1979) measure was used to assess belongingness, maintenance, conflict, and ambivalence, and participants rated the items on a scale of 1 to 9. Hatfield and Sprecher's (1986) measure of passionate love was employed to assess love, and participants rated the items on a scale of 1 to 7. Huston, McHale, and Crouter's (1986) measure was used to assess satisfaction, free of the content of the relationship. Participants rated the items on a scale

of 1 to 7. Stanley and Markman's (1992) measure was used to assess coupleness, values associated with behaving consistently, social concern of family and friends to maintain the relationship, tangible investments, and alternative monitoring, and participants rated the items on a scale of 1 to 7. Udry's (1981) measure was used to measure the ability and desire to replace one's partner, and participants rated the items on a scale of 1 to 4. Each of the scales was calculated so that higher scores indicated greater levels of that construct, for example, higher scores on the measure of alternative monitoring indicated greater alternative monitoring. Data from Phase 1 were used to test the hypotheses of this study.

During the seven monthly Phase 2 interviews, respondents updated the status of their relationships and constructed the graph of the chance of marriage to their original or other partners from the last interview forward to the present time. They also returned diary reports of their activity participation, completed new questionnaires, and repeated some questionnaires from Phase 1 to assess individual and relationship characteristics, including measures of commitment. They were paid \$5 for each short interview that they completed.

During the Phase 3 interview, respondents repeated the procedures from the Phase 1 interview. First, they completed the background and individual questionnaires. Then they updated their graphs of changes in the chance of marriage. Finally, they completed the same questionnaires in Phase 3 as in Phase 1. A few additional questionnaires were added in the Phase 3 interview that had not been previously completed. Respondents were paid \$20 for completing each of the Phase 1 and Phase 3 interviews.

Measurement

The first hypothesis in this study posited that commitment could be measured as a single, unitary construct. The second hypothesis proposed that commitment could be measured independently from the personal predictors of commitment. In this study the measurement of commitment and the personal predictors of commitment (i.e., passionate love, satisfaction, and coupleness), was determined by means of confirmatory factor analyses using structural equation modeling. Based on the factor structure from the confirmatory factor analyses, summed scale scores were created for commitment, passionate love, satisfaction, and coupleness. The results from these confirmatory factor analyses are discussed later.

The measurement of the moral and structural predictors, however, was based on the factor structures of the final solutions from exploratory factor analyses (Jacquet & Surra, 2001). The scores from the items that loaded on each factor were summed to create the moral and structural predictors, including the values associated with behaving consistently, social concern from family and friends, tangible investments, alternative monitoring, and partner replacement. Because most of the scales used in this study were originally factor analyzed on married samples (e.g., Stanley & Markman, 1992; Udry, 1981), each scale was factor analyzed to ascertain the factor structure in this premarital sample (Jacquet & Surra, 2001). All factor analyses were performed using principal axis factor extraction with varimax rotation. Items were dropped if they loaded on two or more factors (i.e., loadings greater than .30), loaded low on all factors (i.e., loadings less than .30), or loaded alone on a factor. These items were unstable, uninterpretable, or

contributed little to the factor (Jacquet & Surra, 2001). All factors, from which the scale scores were created, had eigenvalues that met or exceeded 1.0 and were conceptually sound (cf. Tabachnick & Fidell, 1996).

Moral and structural predictors of commitment. The factor structure of Stanley and Markman's (1992) measure suggested six factors (Jacquet & Surra, 2001); four of which were used as moral and structural predictors in this study, including the values placed on behaving consistently in general, tangible investments, social pressures, and alternative monitoring. Summed scale scores were calculated for these four factors based on the factor structure of prior analyses (Jacquet & Surra, 2001). The values placed on behaving consistently in general served as a moral predictor of commitment, and included five items (e.g., "I don't make commitments unless I believe I will keep them"). Social pressures or concern from family or friends to maintain the relationship included six items (e.g., "My family really wants this relationship to work"). Tangible investments in the relationship included four items (e.g., "I would lose valuable possessions if I left my partner"). Alternative monitoring focused mainly on an individual's thinking about perceived alternatives to the relationship (e.g., "I think a lot about what it would be like to be dating someone other than my partner") and openness to interaction with perceived alternatives (e.g., "Though I would not want to end the relationship with my partner, I would like to have a romantic/sexual relationship with someone other than my partner"). The scale included seven items. This last factor was scored so that higher values indicated greater openness to alternatives.

Partner replacement was assessed by means of Udry's (1981) marital alternatives

scale, which was originally designed to measure spouses' perceptions of the degree to which the partner could be replaced and the quality of one's life if the relationship were to end. Although the scale was developed on a married sample, the factor analysis on this premarital sample produced the same two factors with the same item content, labeled partner replacement and quality of life (Jacquet & Surra, 2001). Only the items that loaded on the partner replacement factor were used in this study because they measured the perceived ability and desire to replace one's partner, whereas the remaining factor focused on the quality of life both emotionally and financially if the relationship were to end. Six items were included in the scale (e.g., "You could get a better partner"). Higher scale scores indicated greater perceived quality of alternatives to the relationship.

Chapter III: Results

The first hypothesis of this study was to determine whether commitment could be measured as a single, unitary construct. To develop a unitary scale, the measurement of commitment started at the item level. I first examined the face validity of the items used to measure commitment. I then performed a confirmatory factor analysis to test whether the selected items formed a single latent factor using structural equation modeling.

Face Validity of the Commitment Items

I ascertained which items fit the focused definition of commitment in terms of their face validity. I defined commitment in this study as individuals' future orientations toward the relationship, specifically the confidence in the future of the relationship and the feelings about commitment. According to this definition, commitment should be measured by items that either assess the expectation that the relationship will last or the individual's feelings about commitment. Two judges who were experts in the measurement of commitment reviewed the items from all of the measures of relational constructs employed in this study to identify those that focused on either the individuals' confidence in the future of the relationship or their feelings about commitment. These measures included Rusbult's commitment measure (1992), Braiker and Kelley's relationship dimensions measure (1979), Hatfield and Sprecher's passionate love measure (1986), Huston and colleagues' satisfaction measure (1986), Stanley and Markman's commitment inventory (1992), and Udry's marital alternatives measure (1981).

In order to establish face validity for the measure of commitment, any item that did not fit the focused definition of commitment was removed from the pool of potential

items. Three items from the Rusbult commitment scale (1992) were not considered measures of commitment by the judges because they either corresponded with the measurement of love (“Do you feel attached to your relationship partner?”) or the measurement of alternative monitoring and partner replacement (“How likely is it you will date someone other than your partner within the next year?” and “Do you ever have fantasies about what life might be like if you weren’t dating your partner?”).

The three remaining items in Rusbult's (1992) measure of commitment were judged to fit the strict definition of commitment. The three items chosen were: “For how much longer do you want your relationship to last?”; “Do you feel committed to maintaining your relationship with your partner?”; and “How likely is it that your relationship will end in the near future?” The final item was reversed scored so that higher scores indicated greater commitment. The first item (“For how much longer do you want your relationship to last?”) assessed both the individual’s future orientation to the relationship and the expectation that the relationship would last. The second item (“Do you feel committed to maintaining your relationship with your partner?”) assessed the individual’s future orientation toward the relationship. The final item (“How likely is it that your relationship will end in the near future?”) measured the individual’s expectation that the relationship would last. Although some may question whether each of these items is free from the content of the relationship, a number of analyses, including confirmatory factor analyses, hierarchical regressions, and tests for differences in chi-square between competing models, were performed to ensure empirically that these items measure commitment independently from its predictors.

In addition to these three items, the judges determined that individuals' estimates of the likelihood that they will eventually marry their partners also fit the focused definition of commitment. These estimates, labeled the chance of marriage, assessed the individual's future orientation toward the relationship as a long-term, marriageable relationship. The percent chance reported at the time of the Phase 1 interview was used as an item in the focused measure of commitment.

The judges also removed any item in any of the scales of the independent variables that matched the focused definition of commitment and placed them in the pool of potential indicators of commitment. Only one item, from the Braiker and Kelley love scale (1979), was identified as a potential indicator of commitment ("How committed do you feel to your partner?"). Although this item did not specifically address individuals' orientation to the future or the relationship, it appeared to address individuals' feelings about commitment in a general sense. Additionally, others have used this item to measure commitment in married couples (Johnson et al., 1999). Of the five items selected to measure commitment, however, the Braiker and Kelley item seemed to be more ambiguous and potentially problematic to the face validity of the scale than any of the four other items because it did not specifically address the future of the relationship in its wording, as the other items did. Nevertheless, the Braiker and Kelley item was included in the measurement of commitment.

Zero-order correlations among the three items from Rusbult's scale (1992), the chance of marriage, and the item from Braiker and Kelley's scale (1979) ranged between

Table 1

Zero-Order Correlations between Items in the Measurement of Commitment

Item	1	2	3	4	5
1. How likely is it that your relationship will end in the near future?	-	.65**	.67**	.58**	.59**
2. How much longer do you want your relationship last?	.62**	-	.69**	.63**	.65**
3. Do you feel committed to maintaining your relationship to your partner?	.58**	.74**	-	.63**	.77**
4. Chance of marriage	.50**	.60**	.55**	-	.62**
5. How committed do you feel to your partner?	.55**	.69**	.73**	.61**	-

Note. Note. Correlations for men are above the diagonal and those for women are below the diagonal. $N=232$ for men and $N=232$ for women.

* $p < .05$, ** $p < .01$.

$r = .58$ and $r = .77$ for men and $r = .50$ and $r = .74$ for women (see Table 1). In general, the correlations among the items appeared to be larger for women than for men.

Additionally, the correlations between the Rusbult item (“Do you feel committed to maintaining your relationship with your partner?”) and the Braiker and Kelley item (“How committed do you feel to your partner?”) were among the strongest for men and women, $r = .77$ and $r = .73$, respectively. The correlations between the chance of marriage and the Rusbult item (“How likely is it that your relationship will end in the near future?”) were the weakest for men and women, $r = .58$ and $r = .50$, respectively.

Confirmatory Factor Analyses of the Measure of Commitment

Once the five items were identified, a confirmatory factor analyses was performed to ensure the items adequately measured commitment. This analysis demonstrated that the five items were caused by a single latent factor and formed a new scale to measure commitment based on the focused definition. Data from both partners in the couple were included in the same analysis using multigroup comparisons in AMOS 4.01. This type of analyses allows men and women to be tested simultaneously to determine if the items form a unitary construct and to explore possible group differences due to gender. The similarities or differences in the measurement of commitment as it pertains to the multigroup comparison between men and women will be discussed later. The factor loadings for these five items ranged from .72 to .87. The evaluation of fit for this model, however, revealed that the chi-square goodness of fit statistic was significant, $X^2(20, N = 464) = 36.65, p = .01$, suggesting that the model was slightly misspecified. Although several possible reasons, such as group differences, could contribute to the lack of fit, a

closer inspection of the modification indices revealed that the residual error term for the Braiker and Kelley (1979) item was associated with a number of error terms from the other four indicators. The associations among residual error terms may have been caused by the ambiguity in the wording of the Braiker and Kelley item. The wording of this item, “How committed do you feel to your partner?” has no reference to the future of the relationship. Whereas the wording of the other items specifically references the future of the relationship.

To test the first hypothesis, only the best items were to be used to measure commitment. A second confirmatory factor analysis testing only the four remaining items was performed to explore empirically whether the Braiker and Kelley (1979) item should be removed from the model. Using the Akaike Information Criterion, or AIC (Akaike, 1987), the 4-item model was evaluated against the 5-item model. The AIC compares alternative models using the same data regardless of whether models are nested within one another. Models with lower values of AIC are considered to fit the data better than models with higher values (Tanaka, 1993). Although no statistical distribution or test exists for significant differences in the values of the AIC, the 4-item model had a substantially lower AIC value (28.38) than the 5-item model (56.65). Given the difference in the AIC, the 4-item model appeared to fit the data better and was chosen over the 5-item model. Based on the empirical evidence from the confirmatory factor analyses, the Braiker and Kelley (1979) item was removed from the measure of commitment.

After the decision had been made to use the four remaining items to measure

commitment, for comparison purposes only, all alternative 4-item models were tested by eliminating a different item in successive models. No alternative 4-item model had a lower AIC value than the selected 4-item model (AIC values = 31.00, 38.52, 40.02, and 40.14). The comparison of AIC values for the alternative 4-item models compared to the selected 4-item model reaffirmed the decision to remove the Braiker and Kelley item.

The fit of the 4-item model was very good, as the chi-square goodness of fit statistic was not significant, $X^2(12, N = 464) = 12.38, p = .42$. To further evaluate the fit of the 4-item model, three additional fit indices were considered. The Incremental Fit Index, or IFI (Bollen, 1989), measures the proportionate improvement in fit by comparing the suggested model with a nested baseline model (Hu & Bentler, 1995). Typically, values for the IFI range between 0.0 and 1.0, but values in an excellent fitting model can exceed 1.0. Acceptable levels of fit for the IFI are traditionally .90 or higher, but have been raised by some to .95 or higher (Hu & Bentler, 1999). The Tucker-Lewis Index, or TLI (Tucker & Lewis, 1973), is another incremental indicator of fit (Hu & Bentler, 1995). The values of TLI also range between 0.0 and 1.0, but as with the IFI, may exceed 1.0 in excellent fitting models. Evaluation of the values for the TLI is similar to the IFI. The Root Mean Square of Approximation, or RMSEA (Steiger & Lind, 1980), is a stand-alone, absolute measure of fit, which compares how well an a priori model reproduces the sample data (Hu & Bentler, 1995). Values for RMSEA range from 0.0 to 1.0. Unlike the IFI and TLI, where greater values indicated good fit, acceptable levels of fit are reversed for RMSEA. Values less than .08 have been traditionally considered acceptable, but some have reduced that level to .06 with lower

values considered to be an excellent fit (Hu & Bentler, 1999).

This particular mix of indices was selected to ensure an accurate portrayal of the fit of the model. Both incremental (e.g., IFI and TLI) and stand-alone, absolute (e.g., RMSEA) indices were included because each type evaluates the model differently. Additionally, the TLI was selected because it is not sensitive to sample size, whereas the IFI and RMSEA were selected because they correct for model complexity (Tanaka, 1993). The fit indices of the 4-item confirmatory factor analyses of commitment suggested an excellent fit of the data, with the IFI and TLI at 1.00 and the RMSEA at .01 (see the first row of Table 2).

The reliability of the new 4-item scale was established using alpha coefficients to demonstrate its internal consistency. The items were first standardized by converting the values to *z* scores to give each item the same metric. The coefficient alpha was $\alpha = .88$ for men and $\alpha = .86$ for women for the four items (see the first row of Table 3).

The first hypothesis, determining whether commitment could be measured as a single, unitary construct, was supported. Starting at the item level, two judges ensured the face validity of the items used to measure commitment. A confirmatory factor analysis demonstrated that the selected items formed a single latent factor. The fit indices of that analysis suggested that the model fit well. Finally, the internal consistency of the scale was established with the reliability alpha coefficients.

The second hypothesis posited that commitment could be measured independently of the personal predictors of commitment. Three analyses were used to test this hypothesis. I first determined the measurement of the personal predictors of commitment

Table 2

Fit Indices of the Confirmatory Factor Analyses Solutions for Commitment, Passionate Love, Satisfaction, and Coupleness

Scale	Final model		Fit indices			
	X ²	df	<i>p</i>	IFI	TLI	RMSEA
Commitment	12.38	12	= .42	1.00	1.00	.01
Passionate love	14.17	12	= .29	1.00	1.00	.02
Satisfaction	1.45	4	= .84	1.00	1.01	.00
Coupleness	7.44	4	= .11	1.00	.98	.04

Note. In the final solutions for commitment and passionate love, men and women were constrained to have the same factor loadings and residual error variances, but not for satisfaction or coupleness. *N* = 464.

Table 3

Alpha Coefficients by Gender for Commitment, Passionate love, Satisfaction, and

	<u>Men</u>	<u>Women</u>
Scale	α	α
Commitment	.88	.86
How likely is it that your relationship will end in the near future? ^a		
How much longer do you want your relationship last?		
Do you feel committed to maintaining your relationship to your partner?		
What is the percent chance that you will eventually marry your partner?		
Passionate love	.83	.82
I posses a powerful attraction for ____.		
For me, ____ is the perfect romantic partner.		
I would rather be with ____ than any one else.		
I have an endless appetite for ____.		
Satisfaction	.85	.89
Empty – full		
Doesn't give me a chance – brings out the best in me		
Hopeful – discouraging ^a		
Rewarding – disappointing ^a		
Coupleness	.83	.79
When push comes to shove, my relationship with my partner comes first.		
I like to think of my partner and me more in terms of “us” and “we” than “me” and “him/her”.		
My relationship with my partner is more important to me than almost anything else in my life.		
When push comes to shove, my relationship with my partner often must take a back seat to other interests of mine. ^a		

Note. $N = 232$.

^a Item was reversed scored.

Coupleness

by performing three separate confirmatory factor analyses, one each for passionate love, satisfaction, and coupleness. Although the independence of the measurement of commitment could have been tested simultaneously in a 4-factor confirmatory factor analysis, the two-factor approach used in this study provided a more parsimonious test of the independence of the measurement than a 4-factor analysis would have. If the 2-factor models fit the data significantly better than the 1-factor models, one could reasonably conclude that commitment was measured independently from its personal predictors.

I then performed hierarchical regressions to examine whether the commitment items specifically measuring individuals' personal feelings or orientation toward the relationship (e.g., "Do you feel committed to maintaining your relationship with your partner?") were more related to the personal predictors of commitment than the commitment items measuring individuals' confidence about the future of the relationship (e.g., "How likely is it that your relationship will end in the near future?"). Although the confirmatory factor analysis suggested that the four items used to measure commitment formed a single latent factor, these hierarchical regressions specifically addressed the semantic argument that the overlap between commitment and its personal predictors may still remain if items measuring individuals' feelings toward the relationship were used to measure commitment.

Measurement of the Personal Predictors of Commitment

Based on the factor loadings from the exploratory factor analyses of each of these established scales (Jacquet & Surra, 2001), the five highest loading items from each scale were selected to measure passionate love, satisfaction, and coupleness, respectively.

Given the negative effect of kurtosis on maximum-likelihood estimation (Bollen, 1989), extremely kurtotic items, defined as those with values greater than three, were eliminated from the analyses and replaced by the next highest loading item. The five items from each scale were tested in three separate confirmatory factor analysis to ascertain whether they were indicators of a single latent factor as hypothesized. Data from both partners in the couple were included in the same analysis using multigroup comparisons. The similarities or difference in the measurement of the personal predictors of commitment as it pertains to the multigroup comparison between men and women will be discussed later.

In these confirmatory factor analyses, however, the chi-square statistic was significant for two of the three personal predictors, satisfaction and coupleness, suggesting that the models were slightly misspecified. Upon closer investigation, the residual error variances from two items in each model were significantly correlated. In both cases, the residual variances from two of the lowest loading items were correlated. Although these correlations could have been posited theoretically, the intent of the model was not to correlate the error variances of each model. In each case, the lowest loading item of the two with correlated error variances was removed from the scale. To ensure the best measurement and to keep the degrees of freedom consistent for each of these models, the lowest loading item was also removed from the passionate love scale even though the fit of the model appeared to be adequate. From the passionate love scale, one item was removed (“_____ always seems to be on my mind”). From the satisfaction scale, one polar adjective item was removed (“Miserable – Enjoyable”). From the coupleness scale, one item was removed (“I tend to think about how things affect “us” as a couple

more than how things affect “me” as an individual”).

Using the Akaike Information Criterion, or AIC (Akaike, 1987), the trimmed 4-item models for each of the personal predictors were evaluated against the 5-item models. The 4-item models had substantially lower AIC values for each personal predictor (30.16 for passionate love, 33.45 for satisfaction, and 39.44 for coupleness) than the 5-item models (55.57 for passionate love, 88.03 for satisfaction, and 81.18 for coupleness). After the decision had been made to use the trimmed 4-item models for each of the personal predictors, all alternative 4-item models were tested by eliminating one item in successive models for comparison purposes only. No alternative 4-item model had a lower AIC value than the previously selected 4-item models (for passionate love, AIC values = 34.15, 36.84, 40.11, and 41.39; for satisfaction, AIC values = 36.81, 53.90, 64.84, and 69.49; for coupleness, AIC values = 41.17, 41.27, 61.00, and 65.37).

Trimming the models to 4-items significantly increased the fit of the data for each personal predictor. For passionate love, the factor loadings for the four items ranged from .70 to .80. The fit of the model was very good, as the chi-square goodness of fit statistic was nonsignificant, $X^2(12, N = 464) = 14.17, p = .29$, and the fit indices indicated an excellent fit (see Table 2). For satisfaction, the factor loadings for the four items ranged from .70 to .90. The fit of the model was good, as the chi-square goodness of fit statistic was nonsignificant, $X^2(4, N = 464) = 1.45, p = .84$, and the fit indices suggested a good fit (see Table 2). For coupleness, the factor loadings for the four items ranged from .59 to .84. The model fit the data well, as the chi-square goodness of fit statistic was nonsignificant, $X^2(4, N = 464) = 7.44, p = .11$, and the fit indices also

indicated a good fit (see Table 2). Using the four items measuring passionate love, satisfaction, and coupleness, the reliabilities of each new scale were computed using alpha coefficients to demonstrate their internal consistency. The coefficient alphas were all acceptably high (see Table 3).

The Independent Measurement of Commitment: 1-Factor versus 2-Factor Models

To test the hypothesis that commitment was measured independently from each of the personal predictors, additional confirmatory factor analyses were performed. These analyses directly tested whether the items measuring commitment and those measuring passionate love, satisfaction, or coupleness should be considered to be two separate constructs or to be one single construct. Men and women were included in the same analyses using multigroup comparisons. For the hypothesis to be supported, the items measuring commitment and those measuring each of the personal predictors should form two separate factors. The indicators of commitment and passionate love, for example, were placed in the same model and measured as two separate latent factors. A chi-square statistic was obtained for this 2-factor model. The model was then simplified by specifying a nested model with one single latent factor comprised of all the passionate love and commitment items. A second chi-square statistic was obtained for the nested, 1-factor model.

To compare the two models, the test of the differences in chi-square was examined. This test was performed by subtracting the chi-square statistic of the more complex, 2-factor model from the chi-square statistic of the simpler, 1-factor model. The difference in the degrees of freedom was also obtained by subtracting the number of

degrees from the 2-factor model from the number of degrees from the simpler, 1-factor model. The values of the resulting differences in chi-square and the degrees of freedom were then evaluated using a chi-square table for significance. In every case, the 1-factor model fit the data significantly worse than the 2-factor models, demonstrating that the latent construct of commitment was empirically distinct from passionate love, satisfaction, and commitment (see Table 4). In fact, with two degrees of freedom, the magnitude of the change in the chi-square was great for all three of the models. The results of these analyses clearly suggest that the measurement of commitment in this study was accomplished independently from the personal predictors of commitment.

Hierarchical Analyses of Commitment Items and Personal Predictors

These confirmatory factor analyses indicated that the 4-item measure of commitment was separate from the personal predictors. Some, however, may argue that the personal predictors of commitment are more highly related to commitment because the definition of commitment, as the future orientation toward the relationship, included both the confidence in its future and the feelings about commitment. This argument suggests that the two items referring to the feelings about commitment may be more related to the personal predictors of commitment because they have more to do with feelings toward the relationship than they do to individuals' future orientations toward the relationship. This semantic argument focuses exclusively on the words "want" and "feel" in the items ("For how much longer do you want your relationship to last?" and "Do you feel committed to maintaining your relationship with your partner?"). Some may consider these items to be similar to the question ("How much do you *want* to stay

Table 4

Comparison of Chi-Square for 1-Factor and 2-Factor Models of Commitment versus Passionate Love, Satisfaction, and Coupleness

Scale items	2-Factor model		1-Factor model		Difference test		
	X ²	df	X ²	df	X ² _{diff}	df _{diff}	<i>p</i>
Commitment with passionate love	75.50	38	209.56	40	134.06	2	< .001
Commitment with satisfaction	93.40	38	520.87	40	427.47	2	< .001
Commitment with coupleness	66.88	38	200.56	40	133.67	2	< .001

Note. *N* = 464. Men and women were tested in the same analyses using multigroup comparisons.

married to ____”) used by Johnson and his colleagues (1999) to measure personal commitment. The items that directly assessed individuals’ expectations that the relationship would last (“How likely is it that your relationship will end in the near future?” and the chance of marriage) may be thought to be less related to the personal predictors. To address this potential argument, two additional regressions were performed.

This argument was empirically tested by separating the 4-item commitment scale into two pairs of items, one pair measuring the individual’s feelings toward the relationship, using the first two items, and one pair measuring the confidence in the future of the relationship, using the second two items. Hierarchical regressions were performed to determine if, after controlling for the shared variance between the two sets of paired items, any additional variance was explained by the predictors of personal commitment, love, satisfaction, and coupleness. The scores for each pair of commitment items were summed to form two variables. For simplicity in describing these analyses, the first pair of items measuring individuals’ feelings regarding their commitment was labeled feelings about commitment, and the second pair of items measuring the expectation the relationship would last was labeled confidence in the future. In order for this semantic argument to be true, the personal predictors would either explain significant amounts of additional variance in only the feelings about commitment or explain substantially larger amounts of variance in the feelings about commitment than in the confidence in the future.

In the first of these hierarchical regressions, the feelings about commitment were

Table 5

Hierarchical Regressions for Feelings about Commitment for Men

Variable	Model 1			Model 2		
	β	B	SE	β	B	SE
Confidence in the future	.79***	.82***	.04	.52***	.54***	.05
Passionate love				.25***	.10***	.02
Satisfaction				.06	.02	.02
Coupleness				.14*	.05*	.02
R^2	.62***			.71***		
ΔR^2				.09***		

Note. $N = 232$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 6

Hierarchical Regressions for Feelings about Commitment for Women

Variable	Model 1			Model 2		
	β	B	SE	β	B	SE
Confidence in the future	.73***	.78***	.05	.48***	.52***	.06
Passionate love				.27***	.10***	.02
Satisfaction				-.04	-.01	.02
Coupleness				.18**	.06**	.02
R^2	.53***			.63***		
ΔR^2				.10***		

Note. $N = 232$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

used as the dependent variable. In the first step of the regression, the confidence in the future was entered as an independent variable. The first step accounted for 62% of the variance for men, and 53% of the variance for women (see Tables 5 & 6). In the second step, passionate love, satisfaction, and coupleness were entered as independent variables. The second step in the regression explained an additional 9% variance for men and 10% for women. The coefficients for passionate love and coupleness, but not satisfaction, were significant for both men and women in the second step, suggesting that the feelings about commitment were still related to passionate love and coupleness after controlling for the confidence in the future.

The results regarding the explanation of additional variance in the second regression were similar to the first (see Table 7 & 8). In the second regression, confidence in the future was used as the dependent variable. Feelings about commitment were used as the independent variable in the first step. The first step accounted for 62% of the variance for men, and 53% of the variance for women. In the second step, passionate love, satisfaction, and coupleness were entered as independent variables. The second step explained an additional 3% variance for men and 9% for women. The coefficients for satisfaction and coupleness, but not passionate love, were significant for both men and women in the second step suggesting that confidence in the future was still related to satisfaction and coupleness after controlling for feelings about commitment.

The results of these two regressions suggested that one set of commitment items shared significant amounts of additional variance with the personal predictors of commitment after controlling for the other set, but that the associations were with

Table 7

Hierarchical Regressions for Confidence in the Future of the Relationship for Men

Variable	Model 1			Model 2		
	β	B	SE	β	B	SE
Feelings about commitment	.79***	.75***	.04	.62***	.59***	.06
Passionate love				-.03	-.01	.03
Satisfaction				.18**	.08**	.02
Coupleness				.14*	.04*	.02
R^2	.62***			.65***		
ΔR^2				.03***		

Note. $N = 232$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 8

Hierarchical Regressions for Confidence in the Future of the Relationship for Women

Variable	Model 1			Model 2		
	β	B	SE	β	B	SE
Feelings about commitment	.72***	.68***	.04	.50***	.47***	.06
Passionate love				-.06	-.02	.02
Satisfaction				.27***	.10***	.02
Coupleness				.25***	.08***	.02
R^2	.53***			.62***		
ΔR^2				.09***		

Note. $N = 232$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

different predictors of commitment. One potential reason that both pairs of items were similarly related to the personal predictors is that the argument overlooks the intent of the questions regarding feelings about commitment and future orientation toward the relationship measured in the words “committed to maintaining” the relationship and wanting it “to last.” The results of these analyses, coupled with those of the confirmatory analyses, clearly demonstrated that commitment, measured with the four items, is a distinct concept from the personal predictors of commitment.

Testing a Full Model of Commitment

The third, fourth, and fifth hypotheses of the study posited that commitment would be associated with the personal, moral, and structural predictors of commitment. The sixth hypothesis suggested that the association between commitment and each of the structural predictors would be stronger when the personal predictors, passionate love, satisfaction, and coupleness, were low. To address these assertions, a number of analyses were performed for men and women separately. First, bivariate, zero-order correlations were computed for the independent and dependent variables used in a full model of commitment. Next, men and women were tested in separate multiple regressions using the proposed model of commitment. Finally, the interactions between the personal and structural predictors of commitment were tested to determine if the associations between commitment and the structural predictors were stronger when the personal predictors were low.

Zero-order correlations. For both men and women, each of the personal, moral, and structural predictors of commitment was significantly correlated with commitment in

Table 9

Zero-order Correlations among the Independent and Dependent Variables in a Full Model of Commitment

Variable	1	2	3	4	5	6	7	8	9
1. Passionate love	-	.58**	.72**	.19*	.40**	.27**	-.56**	-.53**	.69**
2. Satisfaction	.43**	-	.46**	.28**	.36**	.07	-.48**	-.38**	.60**
3. Coupleness	.70**	.28**	-	.22**	.43**	.21**	-.59**	-.56**	.67**
4. Consistency values	.17**	.10	.20**	-	.14*	.12	-.29**	-.13	.28**
5. Social concern	.46**	.39**	.46**	.06	-	.23**	-.34**	-.31**	.51**
6. Investments	.25**	-.03	.36**	.14*	.17**	-	-.13	-.19**	.23**
7. Alternative monitoring	-.69**	-.43**	-.63**	-.26**	-.46**	-.16*	-	.53**	-.61**
8. Partner replacement	-.58**	-.35**	-.56**	-.11	-.44**	-.16*	.47**	-	-.49**
9. Commitment	.65**	.47**	.69**	.22**	.59**	.23**	-.71**	-.62**	-

Note. Correlations for men are reported above the diagonal and correlations for women are reported below. $N = 232$ for men and $N = 232$ for women.

* $p < .05$, ** $p < .01$.

the expected direction lending support to all of the hypotheses (see Table 9). The absolute value of the correlations between the predictors and commitment ranged from $r = .23$ to $r = .69$ for men and from $r = .22$ to $r = .71$ for women. The values placed on behaving consistently in general and tangible investments were the least related to commitment, $r = .28$ and $r = .23$ for men and $r = .22$ and $r = .23$ for women, respectively. Additionally, with the exceptions of investments and the values placed on behaving consistently, the independent variables were moderately correlated with one another. Next, the effect of the predictors on commitment considering the other variables in the proposed model was tested in multiple regressions to account for the shared variance among the variables.

Multiple regressions. Based on the relationships among the variables, a full model of commitment was tested using multiple regressions. Men and women were analyzed separately. All the variables in the proposed model were entered simultaneously to explore the effect of the predictors on commitment considering all the other variables in the model (see Table 10).

The third hypothesis asserted that commitment would be positively related to love, satisfaction, and coupleness. In the regression for men, passionate love, satisfaction, and coupleness were positively related to commitment as predicted. All three standardized betas for passionate love, coupleness, and satisfaction were similar in magnitude. In the model for women, however, only coupleness and satisfaction significantly predicted commitment. Passionate love did not predict commitment for women. Coupleness was the strongest predictor for women. In general, the second

Table 10

Regression Coefficients for the Predictors of Commitment by Gender

Variable	Men's commitment			Women's commitment		
	β	B	SE	β	B	SE
Passionate love	.23**	.17**	.05	.04	.03	.04
Satisfaction	.22***	.19***	.05	.12**	.09**	.03
Coupleness	.22**	.15**	.04	.27***	.17***	.04
Consistency values	.04	.03	.03	.07	.05	.03
Social concern	.17***	.08***	.02	.21***	.08***	.02
Investments	.05	.03	.03	-.01	-.01	.03
Alternative monitoring	-.14*	-.05*	.02	-.24***	-.07***	.02
Partner replacement	-.01	-.01	.06	-.19***	-.20***	.06

Note. $R^2 = .63$ for men, $F(8, 223) = 48.07$, $p < .001$ and $R^2 = .68$ for women, $F(8, 223) = 58.51$, $p < .001$. $N = 232$ for men, and $N = 232$ for women.

* $p < .05$. ** $p < .01$. *** $p < .001$.

hypothesis regarding the positive relationship between the personal predictors and commitment was supported, although the support appeared to be stronger for men than for women.

The fourth hypothesis posited that commitment would be positively, but weakly, related to values placed on behaving consistently in general. The zero-order correlations between the values placed on behaving consistently and commitment were significant for men and women. In the regressions for men and women, however, the associations between the values placed on behaving consistently and commitment were no longer significant when considering all of the other variables in the model. Based on the evidence from the regressions, the fourth hypothesis was not supported.

The fifth hypothesis asserted that commitment would be positively related to social concern from friends and family and to tangible investments in the relationship, and negatively related to alternative monitoring and to partner replacement. In the regression for men, social concern and alternative monitoring significantly predicted commitment in the expected direction, but investments and partner replacement did not. In the regression for women, social concern, alternative monitoring, and partner replacement significantly predicted commitment in the expected direction, but investments did not. The fifth hypothesis received mixed support, as tangible investments did not predict commitment for men or women, and partner replacement did not predict commitment for men only.

One more set of multiple regressions were computed to further address the semantic argument regarding the measurement of commitment discussed earlier. In these

regressions, the dependent variable was recalculated by limiting the measurement of commitment to the pair of items that specifically measured the confidence in the future of the relationship. Although no statistical comparison can be made between the coefficients of these regression models, only slight differences existed between the results (see Table 11). The association between passionate love and commitment was no longer significant for men. For women, the association between the values placed on behaving consistently and commitment was significant, and the association between alternative monitoring and commitment was no longer significant. Conceptually, however, the pattern of results for this model was comparable to the previously reported regressions (see Table 10).

Interactions among the Personal and Structural Predictors

The sixth hypothesis posited that the associations between commitment and the structural predictors of commitment would be stronger under the condition where the personal predictors of commitment were low. This hypothesis was tested using interaction terms in hierarchical regressions. Coupleness was the strongest personal predictor of commitment for women and very close to being the strongest for men, whereas the coefficient for passionate love was not significant for women and the coefficient for satisfaction was smaller in magnitude for women. Given the results of the earlier multiple regressions and the magnitude and significance of the coefficients, coupleness was used to represent the personal predictors. The scores for coupleness and each of the structural factors were centered at zero by subtracting the mean of each variable from its value (Aiken & West, 1991). Each centered structural predictor was

Table 11

Regression Coefficients for the Predictors of Confidence in the Future Measure of Commitment by Gender

Variable	Men's commitment			Women's commitment		
	β	B	SE	β	B	SE
Passionate love	.11	.04	.03	-.04	-.02	.02
Satisfaction	.24***	.11***	.03	.21***	.08***	.02
Coupleness	.19**	.07***	.03	.29***	.09***	.02
Consistency values	.03	.01	.02	.11*	.04*	.02
Social concern	.21***	.05**	.01	.29***	.06***	.01
Investments	.06	.02	.02	-.05	-.01	.01
Alternative monitoring	-.13*	-.02*	.01	-.10	-.02	.01
Partner replacement	-.05	-.03	.03	-.17**	-.10**	.03

Note. $R^2 = .55$ for men, $F(8, 223) = 33.71, p < .001$ and $R^2 = .61$ for women, $F(8, 223) = 43.73, p < .001$. $N = 232$ for men, and $N = 232$ for women.

* $p < .05$. ** $p < .01$. *** $p < .001$.

then multiplied by the centered score for coupleness. The multiple regressions for men and women were then repeated hierarchically, with all of the predictors of commitment entered in the first step and the four newly created interaction terms entered in the second step (see Tables 12 & 13). Both the coefficient and the change in R^2 had to be significant for an interaction to be relevant (Aiken & West, 1991).

In the regression for men, the interaction term between investments and coupleness was significant, $\beta = -.09, p < .05$, and the second step of the regression accounted for a significant amount of additional variance in the model, $\Delta R^2 = .02, p < .05$. The interaction was then plotted by solving the regression equation when coupleness was high and low (i.e., 1 standard deviation above and 1 standard deviation below the mean, respectively). As shown in Figure 2, the interaction suggested that under conditions where coupleness is low for men, the association between commitment and investments was more strongly positive than under conditions where coupleness is high (see Figure 2). Although the slope of the line representing those who were high on coupleness appeared to decline in Figure 2, the correlation between investments and commitment was not significant for this group ($r = .08, p > .05$).

For women, the interaction term between partner replacement and coupleness was significant, $\beta = .12, p < .05$, and the second step of the regression accounted for a significant amount of additional variance in the model, $\Delta R^2 = .02, p < .05$. This interaction suggested that in conditions where coupleness is low for women, the association between commitment and partner replacement was more strongly negative than under conditions where coupleness is high (see Figure 3). The correlations between

Table 12

Hierarchical Regression Coefficients for Men for the Predictors of Commitment and the Interactions

Variable	Model 1			Model 2		
	β	B	SE	β	B	SE
Passionate love	.23**	.17**	.05	.23**	.17**	.05
Satisfaction	.22***	.19***	.05	.20***	.17***	.05
Coupleness	.22**	.15**	.04	.21**	.14**	.04
Consistency values	.04	.03	.03	.04	.03	.03
Social concern	.17***	.08***	.02	.18***	.08***	.02
Investments	.05	.03	.03	.03	.02	.03
Alternative monitoring	-.14*	-.05*	.02	-.14*	-.05*	.02
Partner replacement	-.01	-.01	.06	-.02	-.02	.06
Social concern x coupleness				-.02	-.00	.00
Investments x coupleness				-.09*	-.01*	.01
Alternative monitoring x coupleness				.09	.01	.00
Partner replacement x coupleness				-.07	-.01	.00
R^2	.63***			.65***		
ΔR^2				.02*		

Note. $N = 232$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 13

Hierarchical Regression Coefficients for Women for the Predictors of Commitment and the Interactions

Variable	Model 1			Model 2		
	β	B	SE	β	B	SE
Passionate love	.04	.03	.04	-.03	.02	.04
Satisfaction	.12**	.09**	.03	.14**	.10**	.03
Coupleness	.27***	.17***	.04	.26***	.16***	.04
Consistency values	.07	.05	.03	.06	.05	.03
Social concern	.21***	.08***	.02	.23***	.08***	.02
Investments	-.01	-.01	.03	-.01	-.01	.03
Alternative monitoring	-.24***	-.07***	.02	-.23***	-.07***	.02
Partner replacement	-.19***	-.20***	.06	-.19***	-.20***	.06
Social concern x coupleness				-.08	-.01	.00
Investments x coupleness				-.04	-.00	.00
Alternative monitoring x coupleness				-.03	-.00	.00
Partner replacement x coupleness				.12*	.02*	.01
R^2	.68***			.70***		
ΔR^2				.02**		

Note. $N = 232$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

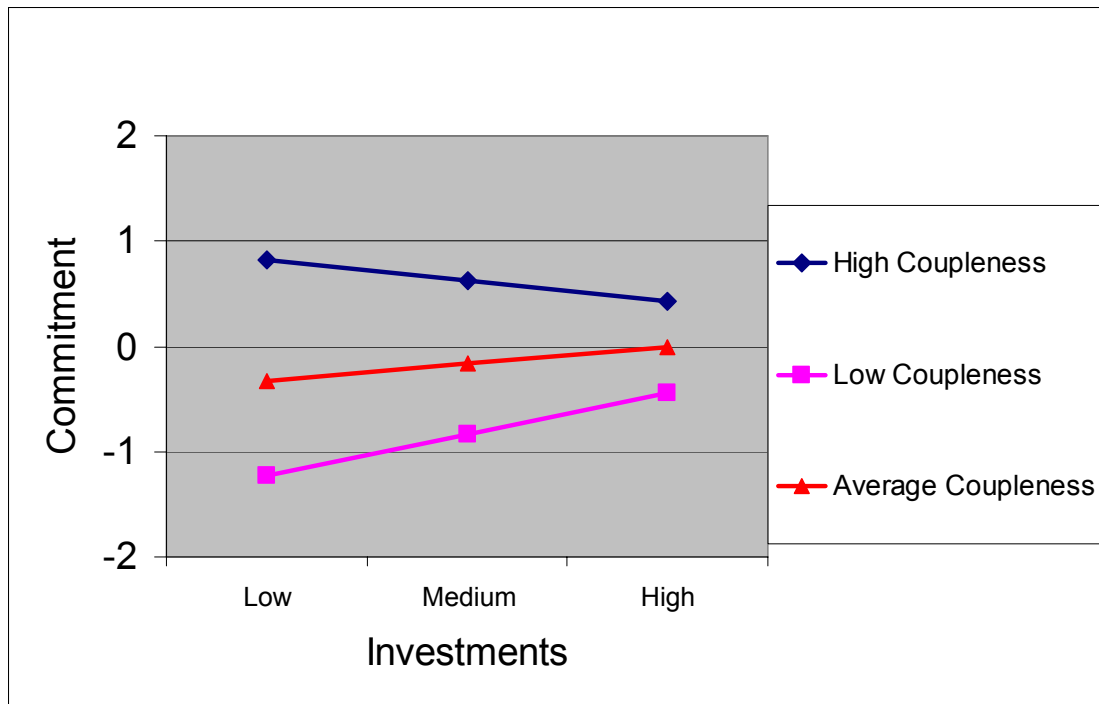


Figure 2. Interaction between investments and coupleness for men.

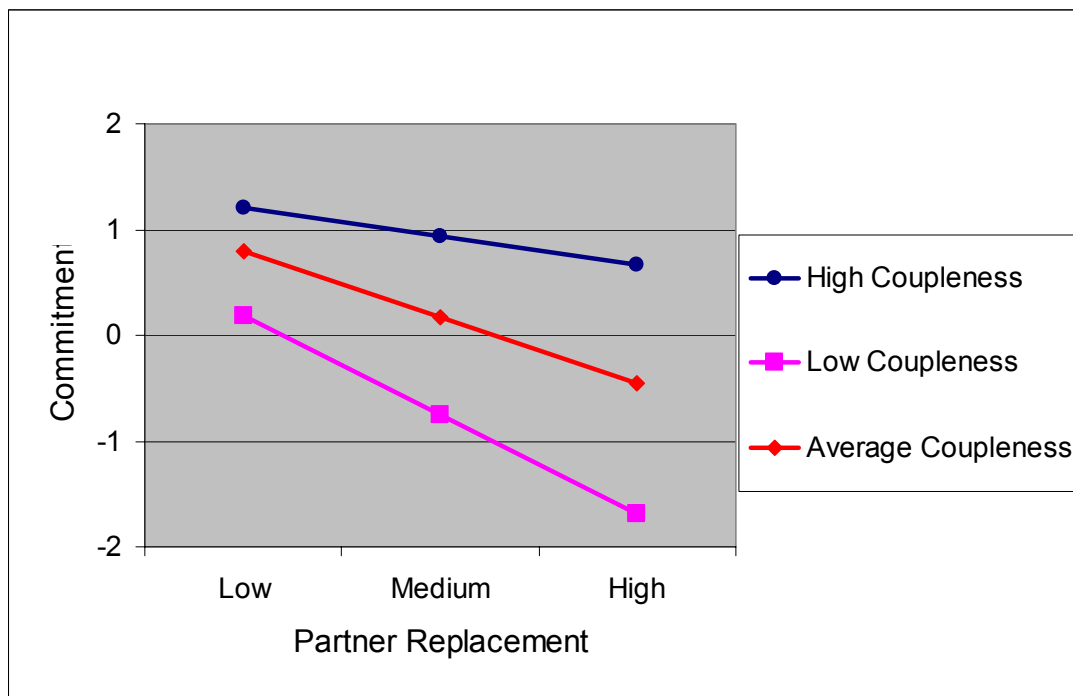


Figure 3. Interaction between partner replacement and coupleness for women.

partner replacement and commitment for the high, average, and low coupleness groups were all significant (high, $r = -.39$, average, $r = -.45$, and low, $r = -.63$, $p < .05$), but the correlation for the low group was substantially larger. The sixth hypothesis was partially supported with significant interactions between investments and coupleness for men and between partner replacement and coupleness for women.

Gender Differences in the Measurement and Prediction of Commitment

Although no specific hypotheses were posited, the gender differences in the measurement and prediction of commitment were explored. The test to determine whether commitment was measured similarly for men and women was performed using confirmatory factor analyses for the 4-item measure of commitment. Potential differences in the prediction of commitment were explored by first examining mean differences in the scales of commitment, and then by testing directly for differences between the coefficients from the regressions.

In the confirmatory factor analyses, data from both partners in the couple were used in the same analysis using multigroup comparisons. The similarities or differences between men and women were examined by constraining the measurement of commitment for men and women to be equal. Using the 4-item model of commitment, the factor loadings and residual error variances from men and women were first estimated individually for both men and women in an unconstrained model allowing men and women to have different measurement of commitment. In a second model, the corresponding factor loadings and residual error variances of men and women were constrained to be equal, requiring the measurement of commitment to be the same for

men and women. This second model was a simpler, nested model with eight additional degrees of freedom.

To compare these two models, the test of the differences in chi-square was examined. This test was performed obtaining the difference in the chi-square statistic between an unconstrained model and a constrained model. In the unconstrained model, the factor loadings and residual error variances were estimated separately for men and women. In the nested, constrained model, men and women were required to have the same factor loadings and residual error variances for each item, freeing an additional eight degrees of freedom. The difference in the degrees of freedom was obtained by subtracting the degrees of freedom from the unconstrained model from the degrees of freedom from the simpler, constrained model. The values of the resulting differences in chi-square and the degrees of freedom were then evaluated using a chi-square table. With eight degrees of freedom, the difference in chi-squares was not significant, $X^2_{\text{diff}}(8, N = 464) = 11.51, p > .05$, suggesting that the simpler model, where men and women were constrained was as good a fit of the data with more degrees of freedom than the unconstrained model (see first row of Table 14). Thus, the model where men and women were constrained to have the same factor loadings and residual error variances was selected over the unconstrained model. The fit of this model was excellent and was reported earlier (see Table 2).

Similar comparisons between the measurement of men and women were made in the confirmatory factor analyses of each of the personal predictors of commitment. For passionate love, the simpler model where the measurement for men and women was

constrained to be the same was selected over the unconstrained model because it fit the data as well as the unconstrained model but had more degrees of freedom (see Table 14). For satisfaction and coupleness, however, the tests of differences in chi-square were significant (see Table 14). Thus, men and women had significantly different factor loadings and residual error variances for satisfaction and coupleness. A closer inspection of this finding revealed that for satisfaction, men and women had the greatest discrepancy in their factor loadings for the adjective pair, “doesn’t give me a chance – brings out the best in me.” This item appeared to be more important to satisfaction in women (factor loading = .86) than men (factor loading = .70). All other factor loadings had differences of less than .06. For coupleness, the greatest discrepancy between the factor loadings of men and women was for the item, “I like to think of my partner and me more in terms of ‘us’ and ‘we’ than ‘me’ and ‘him/her’.” This item appeared to be less important to coupleness for men (factor loading = .60) than for women (factor loading = .70). All other factor loadings had differences of less than .05.

For commitment and passionate love, the constrained models were selected. For satisfaction and coupleness, the unconstrained models were selected. The fit of each of these selected models for passionate love, satisfaction, and coupleness was excellent and was reported earlier (see Table 2). These findings suggested that the measurement of commitment and passionate love was the same for men and women, but was not the same for satisfaction and coupleness.

Paired *t*-tests were also performed to test for mean differences between men and women in the variables used in a full model of commitment (see Table 15). Men and

Table 14

Chi-Square Comparison between Unconstrained and Constrained Models for Gender Differences in Commitment, Passionate Love, Satisfaction, and Coupleness

Scale	Unconstrained model		Constrained model		Difference test		
	X ²	df	X ²	df	X ² _{diff}	df _{diff}	<i>p</i>
Commitment	.87	4	12.38	12	11.51	8	> .05
Passionate love	2.86	4	14.17	12	11.31	8	> .05
Satisfaction	1.45	4	27.41	12	25.96	8	< .01
Coupleness	7.44	4	32.66	12	25.22	8	< .01

Note. *N* = 464.

Table 15

Gender Differences in the Variables in a Full Model of Commitment

Variable	Men		Women		Difference
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i>
Dependent					
Commitment	-.17	3.46	.17	3.31	-1.06
Independent					
Passionate love	22.46	4.58	22.84	4.76	-.88
Satisfaction	23.38	4.03	23.65	4.53	-.69
Coupleness	21.15	5.17	21.02	5.25	.26
Consistency values	28.81	5.04	30.45	4.36	-3.74***
Social concern	26.99	7.48	26.99	8.50	.01
Investments	18.89	5.48	18.53	5.52	.70
Alternative monitoring	23.45	10.28	18.94	10.81	4.60***
Partner replacement	12.74	3.09	12.20	3.05	1.89

Note. $N=232$.

*** $p < .001$.

women had significantly different means for two variables, the values placed on behaving consistently and alternative monitoring. Women reported higher average levels of the values placed on behaving consistently, and men reported higher average levels of alternative monitoring.

Direct statistical tests were also used to test for gender differences in all the corresponding coefficients for men and women in the regressions. Passionate love did not significantly predict commitment for women as it did for men, and partner replacement did not significantly predict commitment for men, as it did for women (see Tables 10 & 11). In direct statistical tests comparing all the corresponding coefficients for men and women (Hardy, 1993), however, no significant differences existed between men and women for any of the coefficients. Thus, no gender differences were found in the prediction of commitment, except for passionate love and partner replacement.

Chapter IV: Discussion and Conclusion

One of the major contributions of this study was the finding that commitment can be measured as a unitary construct that is distinct from its personal predictors. Commitment can be predicted robustly in dating couples when it is measured as the confidence in and feelings about the future viability of the relationship. The associations among commitment and its predictors were strong even with the use of a purged measure of commitment.

The Measurement of Commitment

Although the subject of commitment has received considerable attention in the literature, the measurement of commitment has not (see, Adams & Jones, 1997; Rusbult et al., 1998 for exceptions). In this study, I created a new, focused measure of commitment that has virtually no conceptual overlap with its predictors. Other measures of commitment have been criticized in the literature because they use similarly worded items to measure the predictors and the dependent variable, commitment (Johnson, 1991b; Surra, 1990; Surra et al., 1999). This study used a narrower, more focused definition of commitment to measure the construct. By strictly defining commitment and purging items that overlapped with its predictors, the face validity of the new scale was established. Thus, this measure assessed individuals' future orientations toward the relationship, their confidence in its future and their feelings about commitment.

The analyses in this study also directly addressed the criticisms in the literature regarding the conceptual overlap in the measurement of commitment and of its personal predictors to determine whether the measurement of commitment could be accomplished

independently from its predictors (Johnson, 1991b; Surra, 1990; Surra et al., 1999). Confirmatory factor analyses of the commitment items selected for their face validity indicated they formed a single construct for men and women. This finding was consistent with the results of exploratory factor analyses in other studies (e.g., Lund, 1985, Rusbult et al., 1998). Using the test of the differences in chi-square between 1-factor and 2-factor models, additional confirmatory factor analyses offered strong empirical evidence that commitment was measured independently from passionate love, satisfaction, and coupleness. These analyses also helped establish the construct validity of the new measure of commitment. Although other studies have offered some empirical evidence similar to these findings in the results of exploratory factor analyses, the analyses in this study used direct, statistical tests to demonstrate the independence of the measurement of commitment from its predictors. Hierarchical regressions showed that the commitment items that addressed individuals' feelings about commitment were not more highly associated with the personal predictors of commitment than items that assessed individuals' confidence in the future of the relationship. This finding suggested that the items selected to measure commitment, whether they assessed individuals' feelings about commitment or confidence in the future of the relationship, were effective indicators of commitment.

Given the definition of commitment in this study, some may wonder if the purged measure would be better labeled relationship beliefs than commitment. Although the definition of commitment in this study may differ from laypeople's conceptions of commitment (Fehr, 1999) or from insiders' perspectives of the phenomenological

experience of commitment (Johnson, 1991a; Surra et al., 1999), it was used to predict commitment from an outsider's perspective the way a researcher would measure it. The definition of commitment in this study involves the stability of the relationship, the future orientation toward the relationship, and the commitment to a line of action. For those who remain unconvinced that this measure actually assesses individuals' commitment, this measure provides useful insight into individuals' beliefs about the future or the relationship.

Although the current study has introduced a focused definition of commitment, created a scale, and established its face and construct validity, more analyses are needed to explore additional measurement questions. Longitudinal analyses could address whether the meaning of commitment used in this study is stable over time using stability coefficients and confirmatory factor analyses. Residualized regressions could be used to investigate which variables predict change in commitment over time. Other analyses could explore the relationship between this measure of commitment and relationship stability.

The Prediction of Commitment

The results from these analyses provided strong support for both the use of the prediction-model approach to commitment in dating couples and for the comprehensiveness of the prediction of commitment from the component model approach. Both personal and structural predictors of commitment were strongly associated with commitment when it was defined as individuals' future orientations toward the relationship. The significant associations of the personal and structural

predictors with a single measure of commitment used as a dependent variable in this study differ from the findings of an earlier study used to support the component-model approach that suggested a single measure of commitment could not represent fully the personal, moral, and structural components of commitment (Johnson et al., 1999). In a sample of 187 married individuals, commitment, defined as both the intent to continue and attachment to the relationship, was related only to the personal predictors of commitment (i.e., love, satisfaction, and couple identity; Johnson et al., 1999). The differences in the findings of these two studies may be attributed to the use of measures of commitment that conceptually overlapped with its personal predictors. The overlap may have inflated the association among commitment and the personal predictors and potentially weakened the relationship with the moral and structural predictors. The focused definition and measure of commitment used in the current study may more directly assess the essence of commitment, and, thus, the results of this study may differ at times from the findings from previous research.

Zero-order correlations. The zero-order correlations between commitment and its predictors were all significant in the expected direction. These correlations were also similar in magnitude and direction with those in other research on commitment using similar measures (Stanley & Markman, 1992). Some studies, however, have relied solely on the correlations to explore the associations between commitment and its predictors (e.g., Stanley & Markman, 1992). The correlations from this study, however, suggested that the personal, moral, and structural predictors of commitment were highly intercorrelated. Thus, the magnitude and significance of the associations between

commitment and its predictors was expected to change when all of the other predictors were considered in the same model. In the zero-order correlations, for example, partner replacement correlated significantly for men, $r = -.49, p < .01$, but in the multiple regressions, partner replacement did not significantly predict commitment for men. For this reason, both correlations and regressions were performed and presented.

Personal predictors of commitment. In the multiple regressions, commitment was positively associated with passionate love, satisfaction, and coupleness for men and women, with the exception of a nonsignificant association between passionate love and commitment for women. Within the context of dating relationships, these personal predictors are thought to be associated with commitment because without these positive, relational feelings, many dating individuals would be less committed to their relationships. For men, passionate love, satisfaction, and coupleness appeared to be very important to their future orientation toward the relationship compared to the other predictors in the model, as the coefficients for these three predictors were the strongest of all in the model. For women, however, having a sense of coupleness appeared to be much more influential to their commitment than being satisfied with the relationship or than being passionately in love with their partner.

Moral predictors of commitment. The values associated with behaving consistently were significantly correlated with commitment, but were not significantly associated with commitment in the regressions for either men or women. Others have reported finding similar nonsignificant associations between moral predictors and commitment in studies of dating couples, and have suggested that moral commitment

may not have the same association with commitment in dating couples that others have found in married couples (Rusbult, 1991). Some, however, have found that moral commitment, measured as the obligation and sense of duty to the relationship, may be more important when dating couples are facing large relationship transitions, such as the beginning of a long distance relationship (Lydon et al., 1997). The average correlations for men and women in this study between the values placed on behaving in a consistent manner and commitment was $r = .25$, whereas the average correlation between the values placed on behaving in a consistent manner and commitment in a study of dating and married couples was $r = .44$ (Stanley & Markman, 1992). The apparent difference in the correlations between these studies may be attributed to the focused definition of commitment employed in the current study, to differences in the statuses of the relationship (e.g., dating vs. married), or to other transitional events, such as the start of long distance relationships.

In the regression where the measure of commitment was limited to the two items specifically addressing the confidence in the future of the relationship, the values associated with behaving in a consistent manner were significantly associated with commitment for women. A closer inspection of this finding revealed that these values were primarily associated with the individuals' chance of marriage. Women's values of consistency were positively related to the chance of marriage. Perhaps when women perceive that the relationship is likely to result in marriage, behaving in a consistent manner and following through on the relationship becomes more important to women.

Structural predictors of commitment. The social concern of friends and family was positively associated with commitment for men and women. Two potential explanations exist for this association. In the context of a dating relationship, individuals may readily seek advice or approval from their friends and family about their dating partners and consider the input of their friends and family in decisions about the future of their relationships. Friends and family may also feel open to offer their opinions and advice or to exert influence on the relationships when couples are dating. Whether their concern for the relationship is for it to continue or to end, the findings suggest that family and friends may affect the commitment of individuals in dating relationships.

For men, a significant interaction existed between investments and coupleness. When coupleness was low for men, the association between commitment and tangible investments was more strongly positive than when coupleness was higher. This finding was consistent with the expectations and findings of several researchers who have suggested that structural factors have a greater influence on commitment when the personal predictors of commitment are low (Adams & Jones, 1997; Johnson et al., 1999; Kurdek, 2000; Levinger, 1976; Miller, 1997; Stanley & Markman, 1992). This finding may result from social norms and expectations, requiring men, more so than women, to invest more tangible assets in the relationship. Men, for example, may be expected to pay for dates and other activities. Men are likely seeking a relationship that provides positive, interpersonal qualities, such as a sense of coupleness. If, however, their sense of coupleness with their partner is low, their tangible investments in the relationship

appeared to have a greater positive influence on their future orientation to their relationship than when coupleness is high.

For women, investments, measured as tangible resources invested in the relationship, were weakly associated with commitment in zero-order correlations, but were not significantly associated with commitment in the regressions when all of the predictors were considered. Weak correlations between tangible investments and commitment have been found other research (Stanley & Markman, 1992). In the research using the investment model, however, investments, measured as time, effort, self-disclosure, and shared identity, appear to be more strongly related to commitment (Bui et al., 1996; Rusbult, 1983; Rusbult et al., 1998). The conceptual differences in the measurement of investments (i.e., tangible vs. psychological or social) appear to affect the strength and significance of its association with commitment.

A significant interaction also existed between partner replacement and coupleness for women. When coupleness was low, the association between partner replacement and commitment was more strongly negative than when coupleness was high. One possible explanation for this interaction may be that women have traditionally had a more secondary role in the initiation of new dating relationships, whereas men have traditionally had a more principle role. Although some of these social norms regarding relationship initiation may have changed, some women may perceive difficulty in starting a new relationship and, thus, may be more reluctant to leave a relationship to seek a new one than men may be. In conditions where coupleness is low, women who perceive that they could easily replace their partner or be better off if the relationship were to end may

be more likely to decrease their commitment to the relationship more than when their sense of coupleness is higher.

Alternative monitoring was negatively associated with commitment for both men and women in the regressions. This finding is consistent with research that has shown that daters may remain committed because they are inattentive to potential alternatives to their relationships (Miller, 1997). Partners who are attentive to alternatives may be less committed because they are seeking information about their options (Miller, 1997). Thinking about or being open to alternatives was negatively associated with commitment in dating relationships.

Predicting Commitment in Future Research

The analyses in this study demonstrate that commitment can be robustly predicted by the variables identified in this model. The proposed model explained 63% of the variance in commitment for men and 68% for women. These analyses, however, raised several additional questions regarding the prediction of commitment. First, although the proposed model used in these analyses was considered to be a comprehensive model, additional predictors may be explored in future research. Sacher and Fine (1996), for example, found that the length of the relationship significantly predicted commitment for women in data gathered from 42 dating couples. Stanley and Markman (1992) found that measures of moral commitment, such as attitudes about divorce and termination procedures, were significantly associated to commitment in a sample of 279 dating and married individuals. Other types of love, such as friendship-based love, may yield different findings from those in this study for the association between passionate love and

commitment. Additionally, other moral predictors of commitment, such as feelings of obligation to the partner or relationship, should be included in similar models. These predictors should be studied and the analyses performed in this study should be replicated by others before general conclusions regarding the prediction of commitment can be drawn.

Second, commitment was measured in this study as an individual's future orientation to the relationship and was measured individually. Commitment in relationships, however, can also be seen as a dyadic process, meaning that it requires a partner. The behavior and orientation of the partner will likely influence one's own commitment. For example, if individuals are highly committed to their relationships and behave accordingly, their partners are likely to observe and perceive this commitment and may be more likely to reciprocate by increasing their own commitment. However, commitment may remain individualistic in couples where one partner is highly committed and the partner is not. The dyadic effects of commitment could easily be tested using Hierarchical Linear Modeling to separate the within couple effects from the between-couple effects. One could also include the predictors of the partner in the model to see if they have an effect above and beyond one's own predictors.

Third, the results of one study cannot definitively answer which approach to commitment is the most appropriate. The results of this study, however, have provided support for the use of the prediction-model approach to commitment in dating couples. When commitment was strictly defined and measured, both personal and structural predictors were significantly associated with commitment and accounted for a large

amount of variance in commitment. The strengths of the component model were also born out in the results of this study as a number of personal and structural predictors were associated with commitment. Further research may explore under which conditions one would use the component-model approach to study the insider's perspective rather than the outsider's perspective presented in this study.

Fourth, the findings from this study raise important questions regarding the type of relationship in which commitment is studied. Generally, the prediction-model approach has been used in the study of commitment in dating couples, whereas, the component-model approach has almost exclusively been used in the study of commitment in married couples. Differences in the relationship context between dating and married couples may affect the meaning and prediction of commitment. As a result of their change in relationship status, newlywed married couples, for example, may increase their legal, financial, and familial ties in ways they may not have been willing to do so before marriage. Additionally, the future orientation toward dating relationships may differ substantially from similar orientations toward marital relationships. Comparative analyses between dating and married couples are needed to determine if the definition and measurement of commitment developed in this study functions similarly in the context of marriage. The measure of commitment as the chance of marriage in dating couples may be used to explore differences in the prediction of commitment as it pertains to relationship statuses.

Additionally, the meaning of commitment may differ within dating couples depending on their depth of involvement. Some predictors of commitment may be more

important early on in the formation of relationship, while others may be more associated with commitment later in relationships. In cohabiting relationships, for example, partners may choose to increase tangible investments made to the relationship by moving in together, perhaps increasing the association between investments and commitment. The similarities and differences in the associations between commitment and its predictors will need to be explored and compared for individuals who are at different stages of dating, cohabiting, or married.

Gender Differences in the Measurement and Prediction of Commitment

The third major contribution of this study to the literature was the investigation of gender differences in the measurement and prediction of commitment. The results of the confirmatory factor analyses constraining men and women to be equal suggested that the measurement of commitment was similar for men and women. This finding was important because most studies of commitment have used the same measures of commitment for men and women assuming that the measurement was similar for men and women. Although this analysis does not address the assumptions of the other measures, it suggested that men and women were measured similarly when commitment was defined as an individual's toward the relationship.

In similar confirmatory factor analyses on the personal predictors of commitment, however, the measurement of satisfaction and coupleness differed significantly for men and women. A closer inspection revealed that the item, "I like to think of my partner and me more in terms of 'us' and 'we' than 'me' and 'him/her'", appeared to be more important for men than for women. Perhaps women more naturally move to thinking

about the relationship in terms of a couple than men so that the transition to thinking about the relationship as a couple may be more meaningful for men's sense of coupleness than it is for women's. The satisfaction item, "doesn't give me a chance – brings out the best in me", appeared to be more important to women than men. Perhaps women's satisfaction in relationships is influenced more by the actions of their partners than for men's, specifically those actions that influence the self esteem of the partner. In both cases, when the factor loading and residual error variance for the identified item were left unconstrained, the test of differences in chi-square was no longer significant. This finding suggested that although the items were weighted differently for men and women, the items were important for both genders.

Paired *t*-tests indicated that the average levels of commitment for men and women were similar. Tests of average levels of the predictors in a full model, however, indicated two significant differences. Men reported greater levels of alternative monitoring than men. This finding was similar to others in previous research that showed that men paid more attention paid to alternatives, on average, than women did (Miller, 1997). Additionally, women reported greater levels of the values associated with behaving in a consistent manner. One possible explanation for this finding is that women, more than men, may want to see their relationships through and perceive the values placed on behaving in a consistent manner as important.

Mean differences, however, have not been consistently found in research on commitment. Differences in the measures used in the investment model, for example, have been inconsistent across samples and may only be a characteristic of particular

samples (Rusbult et al., 1998). With these two exceptions, men and women reported similar average levels of the variables used in the predictive model.

Statistical tests of coefficients for men and women revealed that the prediction of commitment was similar for men and women. The literature regarding the gender differences in the prediction of commitment, however, remains mixed, as some have found differences (Sacher & Fine, 1996), while others have not (Bui et al., 1996). Evidence of differences in the prediction of commitment was difficult to detect in this study because of the number of predictors and the shared variance among the predictors affected the size of the regression coefficients. Future tests for gender differences in the prediction of commitment may be better performed by means of multigroup comparisons of a full model using structural equation modeling which could directly test for differences between coefficients. The results of this study, however, suggested that men and women were similar in the measurement and prediction of commitment.

Conclusions

The overarching objective of this study was to use a variety of statistical analyses to determine the measurement and prediction of commitment. Although the analyses of this study have helped accomplish this objective, limitations in the present research need to be discussed and addressed in future research. First, the analyses in the study were cross-sectional. Additional research is needed on the measurement and prediction of change in commitment over time (Kurdek, 2000). Second, all of the data used for these analyses were self-reported. Third, significant differences were found between men and women in the measurement of satisfaction and coupleness. In the regression analyses,

however, their measurement was assumed to be equal, as summed scale scores of the same items were used for men and women. The items responsible for these differences could have been removed and replaced with additional items. Although these differences appeared to be slight, future research should continue to test for differences between men and women in measurement of variables used in analyses.

This study set out to accomplish three major goals. Each of them provided new and valuable information in the study of commitment in dating couples. The contributions of this work to the study of commitment will help shape future research. First, the evidence that commitment can be measured independently of the personal predictors in dating couples should encourage others to employ strictly defined measures to study commitment. Second, the findings of this study suggest that commitment in dating couples is significantly associated with a variety of personal and structural predictors. These findings should encourage others to further examine the relationships between commitment and its predictors in a wide variety of relational contexts. Third, given the mixture of evidence in the literature regarding the differences between men and women in the prediction of commitment, more research is needed to determine whether differences truly exist. Although this study provided important contributions to the literature, each of them introduced new questions that need to be answered.

Appendix A

Commitment

RELATIONSHIP OPINION QUESTIONNAIRE I

This information is confidential, so please answer honestly. Please circle a number that corresponds to your response.

- 1.^a For how much longer do you want your relationship to last?

0	1	2	3	4	5	6	7	8
A Month	Six Months		Twelve		Five Years		Ten Years	
Or Less			Months				Or More	

- 2.^a Do you feel committed to maintaining your relationship with your partner?

0	1	2	3	4	5	6	7	8
Not At All								Completely
Committed								Committed

- 3.^{a*} How likely is it that your relationship will end in the near future?

0	1	2	3	4	5	6	7	8
Not At All								Extremely
Likely To End								Likely to End

4. How likely is it that you will date someone other than your partner within the next year?

0	1	2	3	4	5	6	7	8
Not At All Likely								Extremely Likely
To Date Another								To Date Another

5. Do you feel attached to your relationship with your partner (like you're really "linked" to your partner, whether or not you're happy)?

0	1	2	3	4	5	6	7	8
Not At All								Completely
Attached								Attached

6. Do you ever have fantasies about what life might be like if you weren't dating your partner (i.e., how often do you wish that you weren't involved)?

0	1	2	3	4	5	6	7	8
Never Have								Often Have
Such Fantasies								Such Fantasies

^a Used as a measure of commitment

* Reversed scored

Appendix B

Passionate Love

Part XI: Relationship Questionnaire II

For each item below, please circle the number that best describes your beliefs about your relationship with your dating partner at the present time in your relationship. A blank in an item refers to your dating partner.

The number 7 means you strongly agree with the statement.

The number 1 means you strongly disagree with the statement.

The number 4 means you neither agree nor disagree with the statement.

The numbers 2 and 3 mean you disagree somewhat, and the numbers 5 and 6 mean you agree somewhat, depending on how strongly you agree or disagree.

1. I feel our love is based on a deep and abiding friendship.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

2. Sometimes I feel I can't control my thoughts; they are obsessively on ____.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

3. There are times when my partner cannot be trusted.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

4. I feel that my partner can be counted on to help me.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

5. I would feel deep despair if ____ left me.
- | | | | | | | |
|-------------------|---|---|----------------------------|---|----------------|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly disagree | | | Neither agree nor disagree | | Strongly agree | |
6. I express my love for my partner through the enjoyment of common activities and mutual interests.
- | | | | | | | |
|-------------------|---|---|----------------------------|---|----------------|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly disagree | | | Neither agree nor disagree | | Strongly agree | |
7. My partner is perfectly honest and truthful with me.
- | | | | | | | |
|-------------------|---|---|----------------------------|---|----------------|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly disagree | | | Neither agree nor disagree | | Strongly agree | |
8. My love for my partner involves solid, deep affection.
- | | | | | | | |
|-------------------|---|---|----------------------------|---|----------------|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly disagree | | | Neither agree nor disagree | | Strongly agree | |
- 9.^a I would rather be with ____ than anyone else.
- | | | | | | | |
|-------------------|---|---|----------------------------|---|----------------|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly disagree | | | Neither agree nor disagree | | Strongly agree | |
10. I feel that I can trust my partner completely.
- | | | | | | | |
|-------------------|---|---|----------------------------|---|----------------|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly disagree | | | Neither agree nor disagree | | Strongly agree | |
11. An important factor in my love for my partner is that we laugh together.
- | | | | | | | |
|-------------------|---|---|----------------------------|---|----------------|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly disagree | | | Neither agree nor disagree | | Strongly agree | |
12. My partner is truly sincere in his/her promises.
- | | | | | | | |
|-------------------|---|---|----------------------------|---|----------------|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly disagree | | | Neither agree nor disagree | | Strongly agree | |

13. My partner is one of the most likable people I know.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

14. The companionship I share with my partner is an important part of my love for him/her.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly Agree

15. I feel that my partner does not show me enough consideration.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

16. I feel happy when I am doing something to make ____ happy.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

17. My partner treats me fairly and justly.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

18. My partner is primarily interested in his/her own welfare.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

19. I'd get jealous if I thought ____ were falling in love with someone else.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

20. I yearn to know all about ____.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

21. I want ____ - physically, emotionally, mentally.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

22. ^a I have an endless appetite for affection from ____.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

23. ^a For me, ____ is the perfect romantic partner.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

24. I sense my body responding when ____ touches me.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

25. ____ always seems to be on my mind.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

26. I want ____ to know me - my thoughts, my fears, and my hopes.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

27. I eagerly look for signs indicating ____'s desire for me.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

28. ^a I possess a powerful attraction for ____.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

29. I get extremely depressed when things don't go right in my relationship with ____.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

^a Used as a measure of passionate love.

Relationship Dimensions

The following questions ask about your feelings about your relationship with your dating partner. Please circle the number that best describes your feelings at the present time in your relationship.

- 91

- 92

- ^a Used as a measure of commitment

Appendix D

Commitment Inventory

Part XII: Relationship Obligations

This questionnaire is designed to tell us about the responsibilities that sometimes go along with dating relationships. Some of the items ask about your beliefs while other items ask about your relationship with your dating partner. Answer according to how you feel at the present time.

For each item, circle the number that best describes your beliefs. If you strongly agree with the item, you should circle "7." If you strongly disagree, you should circle "1." If you neither agree nor disagree with an item, you should circle "4." You can circle any number from 1 to 7 to indicate various levels of agreement or disagreement.

^b I don't make commitments unless I believe I will keep them.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

I want to keep the plans for my life somewhat separate from my partner's plans for life.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

I am willing to have or develop a strong sense of an identity as a couple with my partner.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

My relationship with my partner comes before my relationships with my friends.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

Giving something up for my partner is frequently not worth the trouble.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

When the pressure is really on and I must choose, my partner's happiness is not as important to me as are other things in my life.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^e I have trouble making commitments because I do not want to close off alternatives.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^a When push comes to shove, my relationship with my partner comes first.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

It can be personally fulfilling to give up something for my partner.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^b I try hard to follow through on all of my commitments.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

I do not want to have a strong identity as a couple with my partner.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

I get satisfaction out of doing things for my partner, even if it means I miss out on something I want for myself.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

My career (or job, studies, homemaking, childrearing, etc.) is more important to me than my relationship with my partner.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

It makes me feel good to sacrifice for my partner.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^a I like to think of my partner and me more in terms of "us" and "we" than "me" and "him/her".

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^a When push comes to shove, my relationship with my partner often must take a backseat to other interests of mine.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^b *I do not feel compelled to keep all of the commitments that I make.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

I am more comfortable thinking in terms of "my" things than "our" things.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^b *Fairly often I make commitments to people or things that I do not follow through on.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

I do not get much fulfillment out of sacrificing for my partner.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

I tend to think about how things affect "us" as a couple more than how things affect "me" as an individual.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^a My relationship with my partner is more important to me than almost anything else in my life.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

I am not the kind of person that finds satisfaction in putting aside my interests for the sake of my relationship with my partner.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^b Following through on commitments is an essential part of who I am.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^c I think a lot about what it would be like to be dating someone other than my partner.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^d *I have not spent much money on my partner.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^c *My friends would not mind it if my partner and I broke up.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^c *My family would not care either way if this relationship ended.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^e *I am not seriously attracted to anyone other than my partner.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

I would lose money, or feel like money had been wasted, if my partner and I broke up.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^c Though I would not want to end the relationship with my partner, I would like to have a romantic/sexual relationship with someone other than my partner.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^c It would be difficult for my friends to accept it if I ended the relationship with my partner.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^d *I have put very little money into this relationship.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^c My friends want to see my relationship with my partner continue.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^c I know people of the opposite sex whom I desire more than my partner.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

I would lose valuable possessions if I left my partner.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^c My family really wants this relationship to work.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^c *I am not seriously attracted to people of the opposite sex other than my partner.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^d I have put a number of tangible, valuable resources into this relationship.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^c *My family would not care if I ended this relationship.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^d *This relationship has cost me very little in terms of physical, tangible resources.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^c *I do not often find myself thinking about what it would be like to be in a relationship with someone else.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

^a Used as a measure of coupleness

^b Used as a measure of values of consistency

^c Used as a measure of social concern

^d Used as a measure of investments

^e Used as a measure of alternative monitoring

* Reversed Scored

Appendix E

Satisfaction

Part XI: Relationship Opinion Questionnaire II

Now we would like you to think about your relationship over the last month or so, and use the following words and phrases to describe it. For example, if you think that your relationship during the last month or so has been very miserable, put an X in the brackets right next to the word “miserable”. If you think it has been very enjoyable, put an X right next to “enjoyable”. If you think it has been somewhere in between, put an X where you think it belongs. PUT AN X INSIDE ONE BRACKET ON EVERY LINE.

miserable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	enjoyable
^a *hopeful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	discouraging
free	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	tied down
^a empty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	full
interesting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	boring
^a *rewarding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	disappointing
^a doesn't give me much chance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	brings out the best in me
lonely	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	friendly
hard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	easy
worthwhile	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	useless

All things considered, how satisfied or dissatisfied have you been with your relationship over the last month or so? Place an X in the brackets that best describes how satisfied you have been:

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
completely			neutral			completely
satisfied						dissatisfied

^a Used as a measure of satisfaction

* Reversed scored

Appendix F

Partner Replacement

Part X: Relationship Futures Form
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These days it seems like a lot of relationships are breaking up. Of course, this may not happen, but just suppose you and your dating partner were to break up in the near future. As I read each statement, I want you to imagine how likely each situation would be. Decide whether you think each statement would be impossible, possible but unlikely, probable, or certain. For example, if you think the statement, "You could get a better partner" is "impossible" you would respond "IMPOSSIBLE." If you think "Your life would be ruined" is "probable," you would answer "PROBABLE," and so on.

HOW LIKELY IS IT THAT: (CIRCLE ONE)		IMPOSSIBLE	POSSIBLE, BUT UNLIKELY	PROBABLE	CERTAIN
a.	^a You could get a better partner?	1	2	3	4
b.	^a You could get another partner as good as he/she is?	1	2	3	4
c.	You would be quite satisfied without a partner?	1	2	3	4
d.	^a You would be sad, but get over it quickly?	1	2	3	4
e.	You would be able to live as well as you do now?	1	2	3	4
f.	You would be able to take care of yourself?	1	2	3	4
g.	You would be better off economically?	1	2	3	4
h.	^a Your prospects for a happy future would be bleak?	1	2	3	4
i.	^a There are many other men/women you could be happy with?	1	2	3	4
j.	You could support yourself at your present level?	1	2	3	4
k.	Your life would be ruined?	1	2	3	4

^a Used as a measure of partner replacement

* Reversed scored

References

- Adams, J. M., & Jones, W. H. (1997). The conceptualization of marital commitment: An integrative analysis. *Journal of Personality and Social Psychology*, 72, 1177-1196.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- Akaike, H. (1987). Factor analysis and AIC. *Psychometrika*, 52, 317-332.
- Becker, H. S. (1960). Notes on the concept of commitment. *American Journal of Sociology*, 66, 32-40.
- Bollen, K. A. (1989). *Structural equations with latent variables*. New York: John Wiley & Sons.
- Braiker, H. B., & Kelley, H. H. (1979). Conflict in the development of close relationships. In T. L. Huston, & R. G. Burgess (Eds.), *Social exchange in developing relationships*. New York: Academic Press.
- Bui, K., Peplau, L. A., & Hill, C. T. (1996). Testing the Rusbult model of relationship commitment and stability in a 15-year study of heterosexual couples. *Personality and Social Psychology Bulletin*, 22, 1244-1257.
- Drigotas, S. M., Rusbult, C. E., & Verette, J. (1999). Level of commitment, mutuality of commitment, and couple well-being. *Personal Relationships*, 6, 389-409.
- Fehr, B. (1999). Laypeople's conceptions of commitment. *Journal of Personality and Social Psychology*, 76, 90-103.
- Fincham, F. D., & Bradbury, T. N. (1987). The assessment of marital quality: A reevaluation. *Journal of Marriage and the Family*, 49, 797-809.
- Glenn, N. D. (1990). Quantitative research on marital quality in the 1980s: A critical review. *Journal of Marriage and the Family*, 52, 818-831.

- Hardy, Melissa A. (1993). *Regression with dummy variables*. Sage University Papers, QASS # 07-093, Newbury Park CA: Sage.
- Hatfield, E., & Sprecher, S. (1986). Measuring passionate love in intimate relationships. *Journal of Adolescence*, 9, 383-410.
- Hu, L., & Bentler, P. M. (1995). Evaluating model fit. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications*. Thousand Oaks, CA: Sage.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria verses new alternatives, *Structural Equation Modeling*, 6, 1-55.
- Huston, T. L. (2000). The social ecology of marriage and other intimate unions. *Journal of Marriage and the Family*, 62, 298-320.
- Huston, T. L., McHale, S. M., & Crouter, A. (1986). When the honeymoon's over: Changes in the marriage relationship over the first year. In R. Gilmour & S. Duck (Eds.), *The emerging field of personal relationships*. Hillsdale, NJ: Erlbaum.
- Huston, T. L., Surra, C. A., Fitzgerald, N. M., & Cate, R. (1981). From courtship to marriage: Mate selection as an interpersonal process. In S. Duck & R. Gilmour (Eds.), *Personal relationships: Vol. 2: Developing personal relationships*. New York: Academic Press.
- Jacquet, S. E., & Surra, C. A. (2001). Parental divorce and premarital couples: Commitment and other relationship characteristics. *Journal of Marriage and the Family*, 63, 627-638.
- Johnson, M. P. (1991a). Commitment to personal relationships. In W. H. Jones & D. Perlman (Eds.), *Advances in personal relationships* (Vol. 3, pp.117-143). London: Jessica Kingsely.
- Johnson, M. P. (1991b). Reply to Levinger and Rusbult. In W. H. Jones & D. Perlman (Eds.), *Advances in personal relationships* (Vol. 3, pp.171-176). London: Jessica Kingsely.

- Johnson, M. P., & Leslie, L. (1982). Couple involvement and network structure: A test of the dyadic withdrawal hypothesis. *Social Psychology Quarterly*, 45, 34-43.
- Johnson, M. P., Cauglin, J. P., & Huston, T. L. (1999). The tripartite nature of marital commitment: Personal, moral, and structural reasons to stay married. *Journal of Marriage and the Family*, 61, 160-177.
- Kelley, H. H. (1983). Love and commitment. In H. H. Kelley, E. Berscheid, A. Christensen, J. H. Harvey, T. L. Huston, G. Levinger, E. McClintock, L. A. Peplau, & D. Peterson (Eds.), *Close relationships*. New York: W. H. Freeman.
- Kurdek, L. A. (1991). Correlates of relationship satisfaction in cohabiting gay and lesbian couples: Integration of contextual, investment, and problem-solving models. *Journal of Personality and Social Psychology*, 61, 910-922.
- Kurdek, L. A. (2000). Attractions and constraints as determinants of relationship commitment: Longitudinal evidence from gay, lesbian, and heterosexual couples. *Personal Relationships*, 7, 245-262.
- Levinger, G. (1976). A social psychological perspective on marital dissolution. *Journal of Social Issues*, 32, 21-47.
- Lin, Y. W., & Rusbult, C. E. (1985). Commitment to dating relationships and cross-sex friendships in America and China. *Journal of Social and Personal Relationships*, 12, 7-26.
- Lund, M. (1985). The development of investment and commitment scales for predicting continuity of personal relationships. *Journal of Social and Personal Relationships*, 2, 3-23.
- Lydon, J., Pierce, T., & O'Regan, S. (1997). Coping with moral commitment to long-distance dating relationships. *Journal of Personality and Social Psychology*, 73, 104-113.

- Norton, R. (1983). Measuring marital quality: A critical look at the dependent variable. *Journal of Marriage and the Family*, 45, 141-151.
- Miller, R. S. (1997). Inattentive and contended: relationship commitment and attention to alternatives. *Journal of Personality and Social Psychology*, 73, 758-766.
- Rusbult, C. E. (1980). Commitment and satisfaction in romantic associations: A test of the investment model. *Journal of Experimental Social Psychology*, 16, 172-186.
- Rusbult, C. E. (1983). A longitudinal test of the investment model: The development (and deterioration) of satisfaction and commitment in heterosexual involvements. *Journal of Personality and Social Psychology*, 45, 101-117.
- Rusbult, C. E. (1991). Commentary on Johnson's 'Commitment to personal relationships': What's interesting, and what's new? In W. H. Jones & D. Perlman (Eds.), *Advances in personal relationships* (Vol. 3, pp.151-169). London: Jessica Kingsely.
- Rusbult, C. E. (1992). [U.N.C. Marriage research study]. Unpublished survey questionnaires, University of North Carolina at Chapel Hill.
- Rusbult, C. E., Martz, J. M., & Agnew, C. R. (1998). The investment model scale: Measuring commitment level, satisfaction level, quality of alternatives, and investment size. *Personal Relationships*, 5, 357-391.
- Sacher, J. A., & Fine, M. A. (1996). Predicting relationship status and satisfaction after six months among dating couples. *Journal of Marriage and the Family*, 58, 21-32.
- Stanley, S. M., & Markman, H. J. (1992). Assessing commitment in personal relationships. *Journal of Marriage and the Family*, 54, 595-608.
- Steiger, J. H., & Lind, J. M. (1980). *Statistically based tests for the number of common factors*. Paper presented at the annual meeting of the Psychometric Society, Iowa City, Iowa.

- Surra, C. A. (1990). Research and theory on mate selection and premarital relationships in the 1980s. *Journal of Marriage and the Family*, 52, 844-865.
- Surra, C. A., Gray, C. R., Cottle, N. R., & Boettcher, T. M. J. (in press). Attraction, mate selection and courtship. In A. Vangelisti (Ed.), *Handbook of Family Communication*. Hillsdale, NJ: Lawrence Erlbaum.
- Surra, C. A. & Hughes, D. K. (1997). Commitment processes in accounts of the development of premarital relationships. *Journal of Marriage and the Family*, 59, 5-21.
- Surra, C. A., Hughes, D. K., & Jacquet, S. E. (1999). The development of commitment to marriage: A phenomenological approach. In J. M Adams & W. H. Jones (Eds.), *Handbook of interpersonal commitment and relationship stability*. New York: Kluwer Academic/ Plenum.
- Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistics* (3rd ed.). New York: Harper Collins.
- Tanaka, J. S. (1993). Multifaceted conceptions of fit. In K. A. Bollen, & J. S. Long (Eds.), *Testing structural equation models*. Newbury Park, CA: Sage.
- Tucker, L. R., & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika*, 38, 1-10.
- Udry, J. R. (1981). Marital alternatives and marital disruption. *Journal of Marriage and the Family*, 43, 889-897.

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This dissertation was typed by the author.